

**To:** Hennard, Mike (EEO)[mike.hennard@vw.com]  
**From:** Ball, Joel  
**Sent:** Mon 12/29/2014 4:15:55 PM  
**Subject:** Defect report

Hi Mike,

I was contacted by an owner of a 2006 MY VW Jetta TDI diesel with an exhaust leak from the EGR cooler. He is claiming that this issue was not only an emission problem but also was making him sick due to exhaust fumes entering the cabin. Before I respond to him I just wanted to find out if there was a defect report filed or any sort of warranty extension or TSB submitted relating to this issue. Below is the basic description of the problem:

A shaft going through the wall of the EGR cooler connecting to a butterfly valve used to divert the exhaust gasses into the cooler has a faulty seal that will fail and allow the exhaust gas to exit the exhaust into the engine compartment and get into the passenger compartment. This is a health hazard to every VW TDI owner or passenger. To repair according to the dealership, the EGR cooler has to be replaced at a cost to the owner of \$1000.

Best regards,

Joel Ball  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4238  
ball.joel@epa.gov

**To:** Hennard, Mike (EEO)[mike.hennard@vw.com]  
**From:** Ball, Joel  
**Sent:** Fri 12/5/2014 6:23:00 PM  
**Subject:** FW: Warranty Review: Reference no. 140843042

Here is the original inquiry. Thanks for your help in answering this one.

Joel Ball  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4238  
ball.joel@epa.gov

**From:** LaCroix, John  
**Sent:** Monday, December 01, 2014 6:42 AM  
**To:** Ball, Joel  
**Subject:** FW: Warranty Review: Reference no. 140843042

John LaCroix  
Senior Environmental Employment (SEE)  
Cooperative with the Compliance Division  
USEPA  
734-214-4463

**From:** [REDACTED] **Ex. 6** [REDACTED]  
**Sent:** Monday, December 01, 2014 2:27 AM  
**To:** LaCroix, John; [vwcUSTOMERCARE@vw.com](mailto:vwcUSTOMERCARE@vw.com)  
**Subject:** Warranty Review: Reference no. 140843042

To Whom It May Concern (I spoke with Jason at Customer Care recently),

I firmly believe the cost of replacing my MAP sensor should be covered by VW due to the car

*failing a smog test, parts seem to be faulty as shown by Secondary Air Sensor (which is identical to MAP sensor), and what is more, this problem began when the car had 66,722 miles on it as shown by the picture featured below* (I had taken a picture to send to my dad). As I was driving on the freeway last December 2013, all the gears highlighted when getting up to speed on the freeway. When my car was diagnosed at VW Santa Monica recently for the check engine light, the service advisor said all my gears highlight when accelerating due to the MAP sensor. Last December, my dad and I thought it was a sensor gone haywire that shows what gear you are in because the **check engine light did not come on!** Little did we know, *it was in correlation with the MAP sensor*. I remember this day because I was driving from Los Angeles to San Jacinto for a film shoot, and it scared me seeing all the gears highlight while on a freeway.

In addition, I received a notice from VW last year in regards to extending the warranty for the Secondary Air Sensor due to fault with the part. I have researched this part, and it is identical to the MAP sensor listed by VW on the repair invoice. It seems that if a part fails in one area of a car, it is bound to fail in another location of the engine. Thus, the MAP sensor should fall under the same warranty as the Secondary Air Sensor. I do have photos of these parts. You will see that the part numbers **036-906-051-G** (MAP sensor) and **07C-906-051** (Secondary Air Sensor) are interchangeable on websites as shown by the photos below. These parts even share the numbers **906-051**.

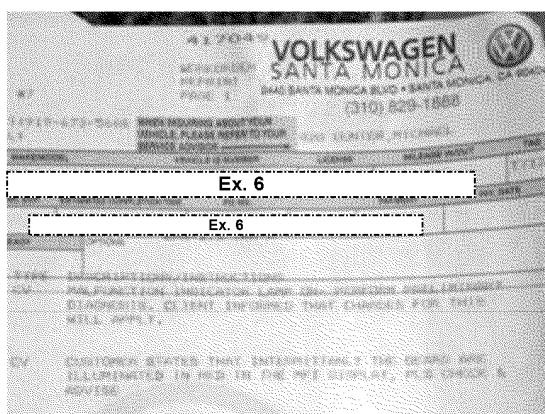
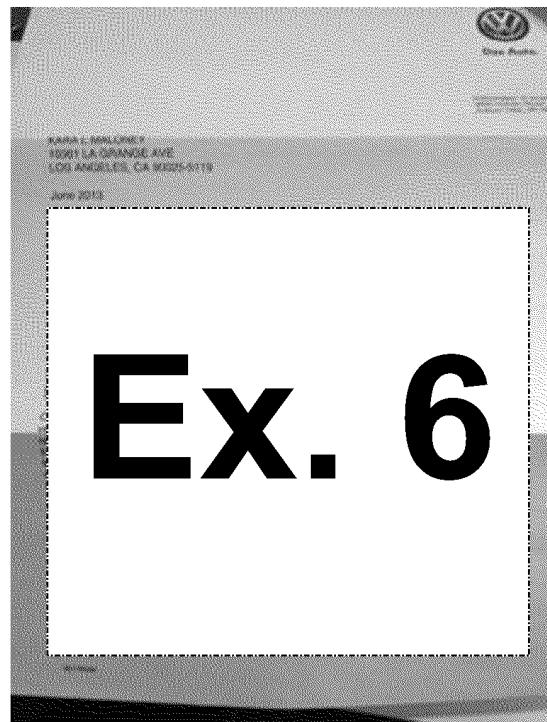
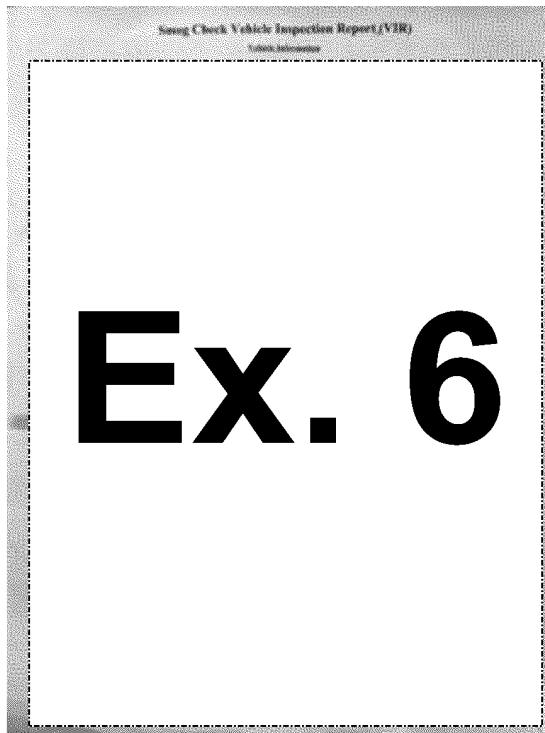
Autozone's website could not find a Secondary Air Sensor, but referenced the MAP sensor instead for my car. Overall, the MAP sensor and Secondary Air Sensor both are providing air pressure measurement and are identical.

I believe VW should also cover the cost because the MAP sensor works in direct correlation with the ECU and OBD II. In fact, the **Smog Test Station failed my OBD II and OBD bulb**. A bad MAP sensor can prevent the OBD II monitors from running. In modern cars, most engines are regulated by an electronic control system. **One key aspect of this system is the manifold absolute pressure sensor – or MAP sensor**. This sensor tracks the pressure in the manifold and delivers the information to the engine's central electronic control unit, or ECU. Once this information is received, the ECU uses it to determine *air density, air mass flow rate, and fuel flow according to the principles of stoichiometry*. Without accurate information from the sensor, these calculations will be off – and your car will suffer. *Bad MAP sensors result in the increase in emissions as well*. Overall, it appears the check engine light comes on if a fault affects emissions.

Please review the photos featured below to further validate what I have stated. The photos include my failed smog test, the Malfunction Indicator Lamp being extended to 8 years or 80,000 miles in my VW handbook due to Federal Emissions Warranty with no restrictions noted, images of the MAP sensor and Secondary Air Sensor, and all the gears highlighted in my car while under 70,000 miles.

Sincerely,

**Ex. 6**



	2007 FTE	2007 TPS	2008	2009 TPS	2009 FTE
Contract services	\$65	\$65	\$65	\$65	\$65
Contract services ongoing funding	\$65	\$65	\$65	\$65	\$65
Tool lease	\$1	\$1	\$1	\$1	\$1
Expenses	\$1	\$1	\$1	\$1	\$1
Local travel	\$10	\$10	\$10	\$10	\$10
Contractor compensation*	\$1	\$1	\$1	\$1	\$1
Electronic Control Module*	\$1	\$1	\$1	\$1	\$1
External gas and liquidation of the vendor gas pipeline	\$10	\$10	\$10	\$10	\$10
MEI (Maintenance Indicator Lamp)*	\$1	\$1	\$1	\$1	\$1
Fuelous material	\$1	\$1	\$1	\$1	\$1
Treat exhaust pipe Pre-catalytic	\$10	\$10	\$10	\$10	\$10
Total	\$100	\$100	\$100	\$100	\$100
Transmission control module	\$100	\$100	\$100	\$100	\$100
Total	\$200	\$200	\$200	\$200	\$200

\* Also referred to as the Vendor Performance Allowance for material, fuel costs, insurance, maintenance.

## California Emissions Performance Warranty

California Emissions Performance Warranty (CEPW) is a new technology-based approach that links energy savings and environmental performance to financial incentives for industrial facilities that implement energy efficiency measures. It gives facilities a range of options to reduce energy consumption by 10-15% through energy efficiency measures such as demand response, performance guarantees, and energy storage. CEPW is a competitive performance-based program that links energy savings to facility-specific energy efficiency projects.

Under the CEPW, participating facilities can receive financial incentives for energy efficiency projects that reduce energy consumption by 10-15% over a three-year period. The program is designed to encourage facilities to invest in energy efficiency projects that are cost-effective and have a positive impact on the environment.

### How the Program Works

The CEPW program is based on a performance-based approach. Participants are required to submit a proposal outlining their energy efficiency project and its expected performance. Once approved, participants will receive financial incentives for meeting their performance goals. The program is designed to encourage facilities to invest in energy efficiency projects that are cost-effective and have a positive impact on the environment.

**GET IN THE ZONE®**



07C906051

GO!

Ex: 04 Camry Battery See More Examples

Replacement Parts

Accessories

Tools & Equipment

Fluids & Chemicals

My:  
1277  
(310)  
07C

My Vehicles  
2009 Volkswagen Rabbit 2.5L  
SFI DOHC PZEV 5cyl.

**GET A \$25 GIFT CARD FOR EVERY \$100 SPENT ON ONLINE SHIP-TO-HOME ORDERS**

HOME / SEARCH RESULTS

YOU SEARCHED FOR 07C906051

## PARTS

Showing 0 of 0 Part

No parts found for 07C906051.

## CROSS REFERENCE

Showing 1 of 1 Cross Reference Result



• MAP Sensor

### BOSCH Map Sensor (Manifold Absolute Pressure) 07C

- Quantity in Stock: 4
- Ships tomorrow
- Part Number: 07C-906-051 / 07C906051
- Manufacturer: BOSCH
- Applications: Volkswagen

List Price: \$45.90

Your Price: \$38.61

You Save: \$7.29 - 16%

Qty: 1

[Add to Wish List](#)

07C906051\_BOS\_04250777

#### FM European Advantage:

- Free Shipping on \$65+ orders
- 2-Year Parts Warranty
- No sales tax unless you are in Colorado
- Same day shipping
- Live inventory

Manufacturer	Number	Description
BOSCH	0 261 230 167	Sensor, intake manifold pressure
ERA	560018	Sensor, intake manifold pressure
STANDARD	16906	Sensor, intake manifold pressure
STANDARD	MS107	Sensor, intake manifold pressure

#### Other parts with same number 07C 906 051 (07C906051)

Manufacturer	Number	Description
VOLKSWAGEN	07C 906 051	Sensor, intake manifold pressure
BENTLEY	07C 906 051	Sensor, intake manifold pressure
VAG	07C906051	pressure sensor

07C-906-051 is referenced to MAP Sensor



## Manifold Absolute Pressure Sensor (MAP)

Measures pressure to help with fuel regulation

Your MAP sensor is responsible for measuring the density of the air present in the manifold so that in conjunction with your MAF, your engine knows how much fuel to disperse

Qty

\$34.77

Ships in 2 Days

ADD TO CART



Live Chat ONLINE

### Product Info

Mfg Part#

07C906051

Part 07C-906-

## BOSCH Sensor - Intake Manifold Air Pressure 036906051G

- Quantity in Stock: 6
- Ships tomorrow
- Part Number: 036-906-051-G / 036906051G
- Manufacturer: BOSCH
- Applications: VW/Audi

List Price \$137.90

Your Price \$31.07

You Save \$106.83 - 77%

Qty  1

ADD TO CART

Add to Wish List

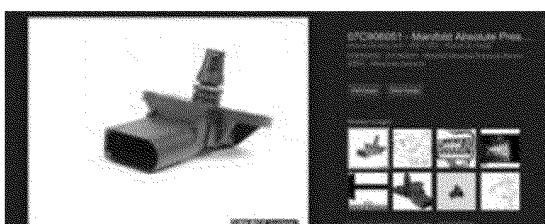
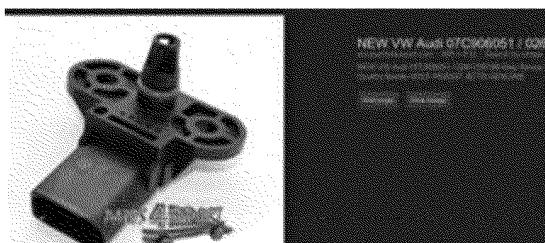
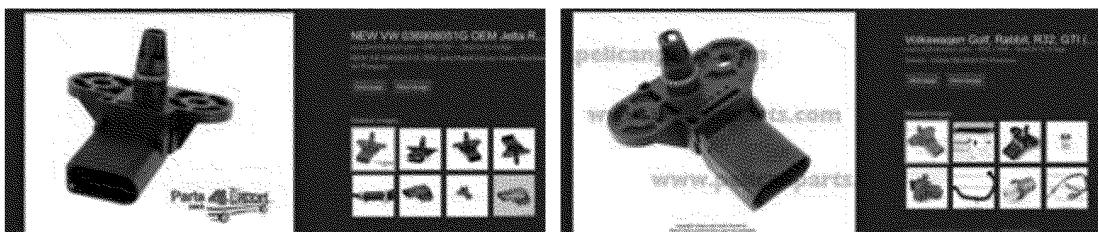
051  
906-051-G



Copyright © 2014, Image used under license

ASK A PROFESSIONAL ABOUT THIS PART

Part 036-



•□□□□□□□□



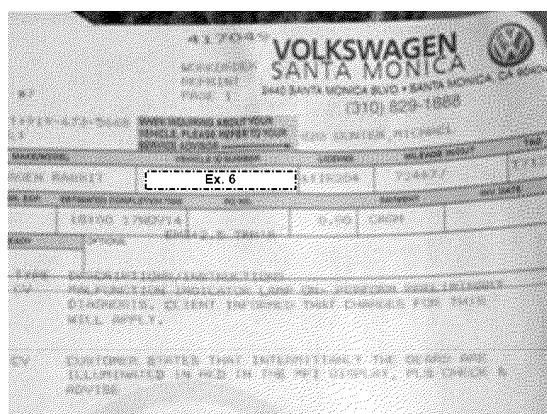
**Ex. 6**



Ex. 6

Ex. 6

**Ex. 6**



**To:** Poirier, Christi[Poirier.Christi@epa.gov]; Daniel Doku  
(ddoku@maseratiusa.com)[ddoku@maseratiusa.com]; Dave Smolarek[dave.smolarek@fcagroup.com];  
David Robertson (DRobertson@mazdausa.com)[DRobertson@mazdausa.com]; Dennis  
Pawlak[Dennis.Pawlak@na.mitsubishi-motors.com]; Douglas Reid[Douglas.Reid@na.mitsubishi-  
motors.com]; Farrukh Khan (KhanF@NRD.NISSAN-USA.COM)[KhanF@NRD.NISSAN-USA.COM];  
Frank Carollo (FCarollo@hatci.com)[FCarollo@hatci.com]; George Hall  
(ghall12@jaguarlandrover.com)[ghall12@jaguarlandrover.com]; Ian Cawdron  
(ICawdron@lotuscars.com)[ICawdron@lotuscars.com]; John H. Rugge Jr.  
(jrug@subaru.com)[jrug@subaru.com] Ex. 7 [Ken J.  
Reed[ken.reed@volvocars.com]; Kim Williams  
(kimberly.williams@fcagroup.com)[kimberly.williams@fcagroup.com]; Lynn  
Byers[lynn.byers@fcagroup.com]; Mark Kobetis M. (mkobetis@ford.com)[mkobetis@ford.com]; Mark M.  
Poll (mpoll1@ford.com)[mpoll1@ford.com]; Matt J. White[matt.j.white@daimler.com]; Naoyasu Okawa  
(nokawa@mazdausa.com)[nokawa@mazdausa.com]; Nathan Hinderer[nathan.hinderer@daimler.com];  
Peace O. Uwague[Peace.OUwague@bmwnaext.com]; Randall C. Harvey[randall.c.harvey@gm.com];  
Robert Alsip[Robert.Alsip@suz.com]; Ross Gatzke[Ross.Gatzke@porsche.us]; Thomas A.  
Beierschmitt[tom.beierschmitt@tema.toyota.com]; Tobias Glas[Tobias.Glas@VW.com]; Tommy  
Chang[Tommy\_Chang@ahm.honda.com]  
**Cc:** Pidgeon, Bill[pidgeon.bill@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Good,  
David[good.david@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Ball, Joel[ball.joel@epa.gov]; Dalton,  
Joel[Dalton.Joel@epa.gov]; Sohacki, Lynn[sohacki.lynn@epa.gov]; Sabourin,  
Michael[sabourin.michael@epa.gov]; Anderson, Tom[Anderson.Tom@epa.gov]; Wehrly,  
Linc[wehrly.linc@epa.gov]; Ott, William[ott.william@epa.gov]; Verify Help Desk[verifyhelp@csc.com]  
**From:** Pidgeon, Bill  
**Sent:** Fri 1/16/2015 8:43:46 PM  
**Subject:** Quarterly Reporting Of The 2014 Q4 IUPV Tests Deadline Extended to February 14, 2015

To Manufacturer IUPV Representatives,

Mark Poll asked if the quarterly reporting of the 2014 Q4 IUPV tests can follow the same revised deadline used for 2013MY data (February 14, 2015) rather than the standard quarterly reporting deadline of January 30, 2015.

This is a good idea, and the answer is yes. Due to the Verify problem, the reporting deadline for 2014 Q4 IUPV tests is also extended to February 14, 2015.

Best wishes,

Bill

\*\*\*\*\*

William M. Pidgeon  
Mechanical Engineer  
U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive  
Ann Arbor, MI 48105-2195  
[pidgeon.bill@epa.gov](mailto:pidgeon.bill@epa.gov)

Phone: 734-214-4416  
Fax: 734-214-4869

**To:** Beth Borland[beth.borland@fcagroup.com]; Poirier, Christi[Poirier.Christi@epa.gov]; Daniel Doku (ddoku@maseratiusa.com)[ddoku@maseratiusa.com]; David Robertson (DRobertson@mazdausa.com)[DRobertson@mazdausa.com]; Dennis Pawlak[Dennis.Pawlak@na.mitsubishi-motors.com]; Farrukh Khan (KhanF@NRD.NISSAN-USA.COM)[KhanF@NRD.NISSAN-USA.COM]; Frank Carollo (FCarollo@hatci.com)[FCarollo@hatci.com]; George Hall (ghall12@jaguarlandrover.com)[ghall12@jaguarlandrover.com]; Ian Cawdron (ICawdron@lotuscars.com)[ICawdron@lotuscars.com]; John H. Rugge Jr. (jrug@subaru.com)[jrug@subaru.com]; [REDACTED] Ex. 7 Ken J. Reed[ken.reed@volvocars.com]; Mark M. Pöll (mpoll@ford.com)[mpoll@ford.com]; Nathan Hinderer[nathan.hinderer@daimler.com]; Peace O. Uwague[Peace.OUwague@bmwnaext.com]; Randall C. Harvey[randall.c.harvey@gm.com]; Ross Gatzke[Ross.Gatzke@porsche.us]; Thomas A. Beierschmitt[tom.beierschmitt@tema.toyota.com]; Tobias Glas[Tobias.Glas@VW.com]; Tommy Chang[Tommy\_Chang@ahm.honda.com]  
**Cc:** Verify Help Desk[verifyhelp@csc.com]; Pidgeon, Bill[pidgeon.bill@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Good, David[good.david@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Ball, Joel[ball.joel@epa.gov]; Dalton, Joel[Dalton.Joel@epa.gov]; Sohacki, Lynn[sohacki.lynn@epa.gov]; Sabourin, Michael[sabourin.michael@epa.gov]; Anderson, Tom[Anderson.Tom@epa.gov]; Ott, William[ott.william@epa.gov]  
**From:** Pidgeon, Bill  
**Sent:** Thur 1/15/2015 9:57:14 PM  
**Subject:** Entering In-Use IUPV Test Data Into EPA's Verify Database – Work Around For Verify Business Rule LD-IUPV-IV-BR030 & Scheduled Fix Date

To Manufacturer IUPV Representatives,

Many of you have received an incorrect Verify error message saying "*Mileage Since OBD Leak Check Performed (IV-39.5) is required*" when entering MY2013 IUPV data. For those that have not encountered this, I pasted an email from the Verify Help Desk that discusses a work-around to avoid the problem. The work-around is at the bottom of this email.

On January 30, 2015, Verify is being updated to correct the problem, so the work-around will not be needed starting on Monday, February 2, 2015. However, the "Latest Allowed Submission Date" for the MY2013 low mileage data is also January 30, 2015. So, to streamline the data entry, we extended the "Latest Allowed Submission Date" for the MY2013 low mileage data to Saturday, February 14, 2015, providing the option to avoid the work-around.

Finally, the distribution list is based on our judgement of who to contact at each company for this IUPV update and is currently limited to one contact per company. We prefer to expand the distribution list to two recipients at each company, while being mindful that limiting it to two per company will facilitate maintaining the list for future

communications. Please provide contact information for two company representatives to improve the distribution list.

Thanks,

Bill Pidgeon

**From:** Vincent E Coleman [<mailto:vcoleman2@csc.com>] **On Behalf Of** Verify Help Desk

**Sent:** Thursday, December 18, 2014 12:53 PM

**To:**

**Subject:** Re: Verify In-Use Vehicle Information Submission Error (HLP-5715)

The EPA has authorized a work around for business rule LD-IUPV-IV-BR030. To address this business rule please enter a '1' in the Mileage Since OBD Leak Check Performed (IV-39.5) field and explain in the comments that it was only entered as a business rule work around.

*LD-IUPV-IV-BR030 - If Readiness Status Complete (IV-38) equals 'Y' (Yes) or Incomplete Readiness Status Codes (IV-39) does not include 'EVAP' (Evaporative System), then Mileage Since OBD Leak Check Performed (IV-39.5) is required.*

Thank you for your patience.

Vincent

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

\*\*\*\*\*

William M. Pidgeon  
Mechanical Engineer  
U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive

Ann Arbor, MI 48105-2195  
pidgeon.bill@epa.gov

Phone: 734-214-4416  
Fax: 734-214-4869

**To:** [redacted] Ex. 7 [redacted] @vw.com]  
**Cc:** [redacted] Ex. 7 [redacted] @arb.ca.gov] Ex. 7 [redacted] @arb.ca.gov]; Bunker,  
Byron[bunker.bryon@epa.gov]; Wehrly, Linc[wehrly.linc@epa.gov]  
**From:** [redacted] Ex. 7 @ARB  
**Sent:** Fri 9/11/2015 9:22:12 PM  
**Subject:** Conditional EO Request  
wem2015-9-11 DRAFT Conditional EO Request Letter JL.docx

[Ex. 7],

As we discussed the other day, VW indicated an interest in getting a conditional EO from ARB to sell its diesel vehicles in California. Attached is a template of a letter you may use to request a conditional executive order. we are currently working on the language that will be incorporated into the draft EO. I expect to send that to you later this afternoon for your review. if you have any questions, call me.

Thanks

[Ex. 7]

[Ex. 7]

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Wehrly, Linc[wehrly.linc@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Dalton, Joel[Dalton.Joel@epa.gov]; Ball, Joel[ball.joel@epa.gov] Ex. 7  
**(EEO)** Ex. 7 @vw.com; Ex. 7 @AUDI.DE; Ex. 7  
Ex. 7 @audi.de; Ex. 7 @vw.com  
**From:** Ex. 7 (EEO)  
**Sent:** Tue 7/15/2014 9:54:39 PM  
**Subject:** RE: VW Diesel DEF Refueling Strategy  
201407 A6A7 MY17-18.pdf

Attached is a slide for discussion at 1:00 tomorrow.

**Ex. 7**

-----Original Appointment-----

**From:** Ex. 7 (EEO)  
**Sent:** Tuesday, July 15, 2014 4:27 PM  
**To:** Snyder, Jim  
**Cc:** Wehrly, Linc; Wright, DavidA (Wright.DavidA@epa.gov); Dalton, Joel (Dalton.Joel@epa.gov); Ball, Joel (ball.joel@epa.gov); Ex. 7 @AUDI.DE Ex. 7  
Ex. 7 @vw.com  
**Subject:** Accepted: VW Diesel DEF Refueling Strategy  
**When:** Wednesday, July 16, 2014 1:00 PM-2:00 PM (UTC-05:00) Eastern Time (US & Canada).  
**Where:** AA-Room-Office-C35-ConfRoom/AA-OTAQ-OFFICE

Hello Jim:

As we discussed on the phone, I understand that EPA is preparing to sign-off on the rulemaking that addresses the more frequent intervals for DEF replacement. We still have one question that we can discuss (it may take a short time). Ex. 4 - CBI

Ex. 4 - CBI

Best regards,

**Ex. 7**

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**Ex. 7**

Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.

**Ex. 7**

**To:** [redacted] **Ex. 7** @vw.com]; Snyder, Jim[Snyder.Jim@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Dalton, Joel[Dalton.Joel@epa.gov]; French, Roberts[french.roberts@epa.gov]; Ott, William[ott.william@epa.gov]  
**Cc:** [redacted] **Ex. 7** @volkswagen.de; [redacted] @vw.com;  
[redacted] **Ex. 7** [redacted]  
[redacted] **Ex. 7** @volkswagen.de]  
**From:** Good, David  
**Sent:** Thur 7/10/2014 3:37:29 PM  
**Subject:** RE: VW PHEV label calculation and BEV testing  
[EV Verify Rel 9and10-Charge Depleting example data.8-9-2012.pdf](#)  
[PHEV - Verify Rel9-Charge Depleting example data-2-10-2011.pdf](#)  
[Accord PHEV FE Label 04-15-13-final from Honda.pdf](#)  
[2014 volt label image-from GM-6-10-2013.pdf](#)  
[2014 Porsche Panamera PHEV FE Label-from Ross-3-31-2014.pdf](#)  
[2015 Porsche 918 FE label-from Ross-3-19-2014.pdf](#)  
[2014MY LEAF Label-from Nissan-1-14-2014.pdf](#)

[redacted] **Ex. 7** [redacted]

Here are some templates for entering EV & PHEV test data into Verify plus a few FE Labels (window stickers). Most of the labels are 2014---so you'll have to revise the average vehicle costs, etc to the 2015 values (24 mpg & \$11,000 5-year cost) plus the ranges in class and the best overall mpg rating (119 MPGe).

Let me know if you need any more Verify examples or FE Labels.

Dave

**From:** [redacted] **Ex. 7** @vw.com]  
**Sent:** Wednesday, July 09, 2014 1:47 PM  
**To:** Snyder, Jim; Wehrly, Linc; Wright, DavidA; Ott, Franz; Dalton, Joel; French, Roberts; Good, David  
**Cc:** [redacted] **Ex. 7** [redacted]  
**Subject:** RE: VW PHEV label calculation and BEV testing  
**Importance:** High

To all:

Attached please find an updated copy of the presentation material for tomorrow's meeting. Most of the information is the same as distributed with the meeting invitation, however, some clarification has been made. Questions on the topics covered are found at the bottom of the slides. In addition, Slide 9 (new) includes some specific test-related questions.

You will note that the slides pertaining to the wall box for EV charging have been removed, since we believe that our questions have been answered. We will be bringing a wall box and discussing the installation for forthcoming testing. We also look forward to seeing the laboratory's charge monitoring set-up.

Best regards,

**Ex. 7**

---

**Ex. 7**

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone

Cell: (

E-Mail

**Ex. 7**

-----Original Appointment-----

**From:** Snyder, Jim [<mailto:Snyder.Jim@epa.gov>]

**Sent:** Friday, June 27, 2014 2:11 PM

**To:** Snyder, Jim; Wehrly, Linc; Wright, DavidA; Ott, Franz; Dalton, Joel; French, Roberts; Ex. 7

**Ex. 7**

**Cc:** Ex. 7

**Subject:** VW PHEV label calculation and BEV testing

**When:** Thursday, July 10, 2014 9:30 AM-10:30 AM (UTC-05:00) Eastern Time (US & Canada).

**Where:** AA-Room-Office-N66-ConfRoom/AA-OTAQ-OFFICE

When: Thursday, July 10, 2014 9:30 AM-10:30 AM (GMT-05:00) Eastern Time (US & Canada).

Where: AA-Room-Office-N66-ConfRoom/AA-OTAQ-OFFICE

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*

<< File: 2015 PHEV calculations \_Berechnungsvorlage\_02.pptx >>

## Example - Charge Depleting Data for an Electric Vehicle

U.S. Environmental Protection Agency  
Verify: Engine and Vehicle Compliance System

Welcome, David Good. Today is Monday, November 28, 2011 (ET)

VERIFY Intranet Home

[Back](#) [Help](#) [Logout](#)

Record Number:  
 << < > >>  
 of 0

[Search](#)[Search Results](#)

## Test Information Details

[Test Information](#) [EPA Tab](#)

## General Information

Process Code	Correction Submission	Mfr Code	MTX - Mitsubishi Motors Corporation
Test Number	CMTX10016275	Exhaust Evap Test Number Link	
Vehicle ID / Configuration	EB12-EM21/0	Test Date	2011-08-15

## EPA Only Fields

Dataset Status	Active	Submission Date	11/21/2011
Test Category	Charge Depleting	LOD Test Number	
EPA Dyno Number		Test 5-Cycle Category	Not 5-Cycle

## Test Particulars

Test Procedure	81 - Charge Depleting UDDS	Test Fuel Type	62 - Electricity
Verify Test Lab ID	1	Odometer Units	M
Test Start Odometer Reading	300	4WD Test Dyno	No
State of Charge Delta Indicator	No	Fuel Batch ID	MOKZEV
Fuel Batch Mfr Code	MTX	Diesel Adjustment Factor	Downward
Fuel Batch Calibration Number	1101	Usage	
Retest Indicator	No	Retest Reason	N/A
Verify Test Number That Was Retested		Manufacturer Confirmatory Test?	No
Original Manufacturer Verify-Test Number That Was Confirmed			

## Analytically-Derived FE / CREE

Analytically Derived?	No	ADFE Base Verify Test Number	
ADFE Total Road Load Horsepower	N/A	ADFE ETW	N/A
ADFE N/V Ratio	N/A		

## PHEV/Charge Depleting Test Information

Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	18.3012
Charge Depleting Range (Calculated miles)	97.935	Charge Depleting Range (Actual miles)	97.935
Equivalent All Electric Range (miles)	97.935	Number of Charge Depleting Bags / Phases Conducted	1
Fuel Economy Value Units	miles per gallon	(Please enter unadjusted test data.)	

Please be sure to enter units of mpg

## Test Results

UDDS/Highway/US06 Bag/Phase Number 1

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value
ACT-DISTANCE ( Actual Distance Driven (miles) )	97.935	-
AMP-HRS ( Integrated Amp-hours )	0	-
AS-VOLT ( Average System Voltage )	0	-
CO ( Carbon Monoxide )	0	-
CO2 ( Carbon dioxide )	0	-
CREE ( Carbon-Related Exhaust Emissions )	0	-
END-SOC ( System End State of Charge )	0	-

Amp <del>(hours)</del>			
HC-TOTAL ( Total Hydrocarbon )	0		
MFR FE ( Manufacturer Fuel Economy )	180.4		180.4
NOX ( Nitrogen Oxide )	0		
START-SOC ( System Start State of Charge )	0		
Amp <del>(kWh-hours)</del>			

## Verify-Calculated Fields

System Miles 289

Note: Verify doesn't perform this calculation. Verify currently defaults to the Mfr's value

## Fuel Economy

Unrounded Unadjusted Fuel Economy

Rounded Unadjusted Fuel Economy

Unrounded Adjusted Fuel Economy

Rounded Adjusted Fuel Economy

## CREE / OPT-CREE

Unrounded Unadjusted CREE

Rounded Unadjusted CREE

Unrounded Adjusted CREE

Rounded Adjusted CREE

Unrounded Unadjusted OPT-CREE

Rounded Unadjusted OPT-CREE

Unrounded Adjusted OPT-CREE

Rounded Adjusted OPT-CREE

## Manufacturer Test Comments

This is official EPA confirmatory data. (Temporarily, inputted by Mfr.) UDDS AER(mile):97.935 , AC Energy(kWh/100mile):18.6705

[View Related Confirmatory Test Decision Information](#)[EPA@Work Home](#) | [EPA Home](#) | [Accessibility](#)URL: <https://verify-as1.nvfel-pmn1.epa.gov:8080/verify-web/cft/ld/testInfoUpdateRetrieve.do>

$$\text{MFR FE} = \frac{33,705 \text{ (kW-hr)}}{\text{Recharge Event Energy (kW-hr)}} \times \text{charge depleting range (miles)}$$

ASTM Round to tenths  
(units are MPG<sub>e</sub>)



## U.S. Environmental Protection Agency Verify: Engine and Vehicle Compliance System

VERIFY Intranet Home

Home &gt; Light-Duty Vehicle &amp; Truck &gt; Fuel Properties Details

Welcome, David Good. Today is Monday, November 28, 2011 (ET)

[Back](#) [Help](#) [Logout](#)

Record Number:

< >

of 0

### Fuel Properties Details

#### General Information

Mfr Code	MTX	Fuel Batch Id	MOKZEV
Submission Date	11/20/2011	Test Fuel Type	62 - Electricity
Fuel Calibration Number	1101	Fuel Batch Calibration Ineffective Date	
Fuel Batch Calibration Effective Date	2011-05-23		
Fuel Batch Calibration Date	2011-03-01		
Carbon Weight Fraction NMHC		Carbon Weight Fraction HC	
Exhaust Carbon Weight Fraction		Fuel Density	
Fuel Methanol Volume Fraction		Fuel Net Heating Value	
Fuel Specific Gravity		Weight Fraction CO2	
Fuel Blend Carbon Weight Fraction			

[EPA@Work Home](#) | [EPA Home](#) | [Accessibility](#)URL: <https://verify-as1.nvfel-pmn1.epa.gov:8080/verify-web/cft/lid/fuelPropUpdateRetrieve.do>

# Example - Charge Depleting Data for a PHEV



## Verify: Engine and Vehicle Compliance System

U.S. Environmental Protection Agency

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[VERIFY Intranet Home](#)

[Home](#) > [Light-Duty Vehicle & Truck](#) > [Search for Test Information](#) > [Test Information Search Results](#) > [Test Information Details](#)

Record Number:

<< < 1 > >>  
of 1

[Search](#)

[Search Results](#)

### Test Information Details

Test Information EPA Tab

#### General Information

Process Code	Correction Submission	Mfr Code	GMX - General Motors LLC
Test Number	CGMX10017746	Exhaust Evap Test Number Link	
Vehicle ID / Configuration	141DRN4804 / 1	Test Date	2011-11-04

#### EPA Only Fields

Dataset Status	Active	Submission Date	01/04/2012
Test Category	Charge Depleting	LOD Test Number	
EPA Dyno Number		Test 5-Cycle Category	Not 5-Cycle

#### Test Particulars

Test Procedure	81 - Charge Depleting UDDS	Test Fuel Type	62 - Electricity
Verify Test Lab ID		Odometer Units	M
Test Start Odometer Reading	5038	4WD Test Dyno	No
State of Charge Delta Indicator	Yes	Fuel Batch ID	
Fuel Batch Mfr Code		Diesel Adjustment Factor	Downward Usage
Fuel Batch Calibration Number		Retest Reason	N/A
Retest Indicator	No	Manufacturer Confirmatory Test?	No
Verify Test Number That Was Retested			
Original Manufacturer Verify-Test Number That Was Confirmed			

#### Analytically-Derived FE / CREE

Analytically Derived?	No	ADFE Base Verify Test Number	
ADFE Total Road Load Horsepower	N/A	ADFE ETW	N/A
ADFE N/V Ratio	N/A		

#### PHEV/Charge Depleting Test Information

Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	13.819
Charge Depleting Range (Calculated miles)	56.48	Charge Depleting Range (Actual miles)	56.48
Equivalent All Electric Range (miles)	55.85	Number of Charge Depleting Bags / Phases Conducted	9
Fuel Economy Value Units	miles per gallon		

Please be sure to enter units of mpg.

#### Test Results

UDDS/Highway/US06 Bag/Phase Number 1

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value
ACT-DISTANCE ( Actual Distance Driven (miles) )	7.439	-
AMP-HRS ( Integrated Amp-hours )	3.953	-
AS-VOLT ( Average System Voltage )	384.77	-
CO ( Carbon Monoxide )	0	-
CO2 ( Carbon dioxide )	0	-
CREE ( Carbon-Related Exhaust Emissions )	-	-
END-SOC ( System End State of Charge (Amp hours) )	3.953	-
FE BAG 1 ( Bag 1 Fuel Economy )	0	0
FE BAG 2 ( Bag 2 Fuel Economy )	0	0

Should be zero for series PHEVs, but not zero for parallel (blended) hybrids

Please enter Reda (calculated range to the calculated transition point in 2 places) per SAE J1711 page 47-48

Please enter CARB value

cumulative

Please enter CO<sub>2</sub> CREE & MFR FE in Phase 1 for the entire charge depleting test sequence (up to the transition point where the vehicle becomes charge sustaining)

See note on page 2

$$MFR\ FE = 33.705 \text{ (kW-hr/gal)} \times \frac{\text{Charge Depleting Range (miles)}}{\text{Recharge Event Energy (kW-hr)}}$$

Page 2 of 4

ASTM rounded to tenths  
(units are MPGe)

HC-NM (Non-methane Hydrocarbon)	0	-
HC-TOTAL (Total Hydrocarbon)	0	-
METHANE (CH4 - Methane)	0	-
MFR FE (Manufacturer Fuel Economy)	137.8	137.8
NMOG (Non-methane organic gas (California))	0	-
NOX (Nitrogen Oxide)	0	-
START-SOC (System Start State of Charge Amp Watt-hours)	0	-

UDDS/HIGHWAY/US06 Bag/Phase Number 2

Please include  
FE Bag 1 and FE Bag 2  
for all phases, where:

- FE Bag 1 = the gasoline-only fuel economy for each phase
- FE Bag 2 = 0 (needed for a business rule)

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value
ACT-DISTANCE (Actual Distance Driven (miles))	7.453	-
AMP-HRS (Integrated Amp-hours)	7.809	--
AS-VOLT (Average System Voltage)	378.24	--
CO (Carbon Monoxide)	0	-
END-SOC (System End State of Charge Amp Watt-hours)	7.809	-
FE BAG 1 (Bag 1 Fuel Economy)	0	0
FE BAG 2 (Bag 2 Fuel Economy)	0	0
HC-NM (Non-methane Hydrocarbon)	0	-
HC-TOTAL (Total Hydrocarbon)	0	-
METHANE (CH4 - Methane)	0	-
MFR FE (Manufacturer Fuel Economy)	0	0
NMOG (Non-methane organic gas (California))	0	-
NOX (Nitrogen Oxide)	0	-
START-SOC (System Start State of Charge Amp Watt-hours)	3.953	-

UDDS/HIGHWAY/US06 Bag/Phase Number 3

Note: Verify doesn't perform this calculation. Verify currently defaults to mfr's value.

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value
ACT-DISTANCE (Actual Distance Driven (miles))	7.464	-
AMP-HRS (Integrated Amp-hours)	11.73	--
AS-VOLT (Average System Voltage)	372.04	--
CO (Carbon Monoxide)	0	-
END-SOC (System End State of Charge Amp Watt-hours)	11.73	-
FE BAG 1 (Bag 1 Fuel Economy)	0	0
FE BAG 2 (Bag 2 Fuel Economy)	0	0
HC-NM (Non-methane Hydrocarbon)	0	-
HC-TOTAL (Total Hydrocarbon)	0	-
METHANE (CH4 - Methane)	0	-
MFR FE (Manufacturer Fuel Economy)	0	0
NMOG (Non-methane organic gas (California))	0	-
NOX (Nitrogen Oxide)	0	-
START-SOC (System Start State of Charge Amp Watt-hours)	7.809	-

UDDS/HIGHWAY/US06 Bag/Phase Number 4

Should be zero for series PHEVs until the transition phase. For parallel (blended) PHEVs, please enter the emissions & FE Bag 1 data for each phase.

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value
ACT-DISTANCE (Actual Distance Driven (miles))	7.466	-
AMP-HRS (Integrated Amp-hours)	15.69	--
AS-VOLT (Average System Voltage)	365.29	--
CO (Carbon Monoxide)	0	-
END-SOC (System End State of Charge Amp Watt-hours)	15.69	-
FE BAG 1 (Bag 1 Fuel Economy)	0	0
FE BAG 2 (Bag 2 Fuel Economy)	0	0
HC-NM (Non-methane Hydrocarbon)	0	-
HC-TOTAL (Total Hydrocarbon)	0	-
METHANE (CH4 - Methane)	0	-
MFR FE (Manufacturer Fuel Economy)	0	0
NMOG (Non-methane organic gas (California))	0	-
NOX (Nitrogen Oxide)	0	-

Cumulative --

Cumulative --

START-SOC ( System Start State of Charge ) <i>Amp Watt-hours</i>	11.73	-
---	-------	---

UDDS/HIGHWAY/US06 Bag/Phase Number 5

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value
ACT-DISTANCE ( Actual Distance Driven (miles) )	7.461	-
AMP-HRS ( Integrated Amp-hours )	19.71	--
AS-VOLT ( Average System Voltage )	359.27	--
CO ( Carbon Monoxide )	0	-
END-SOC ( System End State of Charge ) <i>Amp Watt-hours</i>	19.71	-
FE BAG 1 ( Bag 1 Fuel Economy )	0	0
FE BAG 2 ( Bag 2 Fuel Economy )	0	0
HC-NM ( Non-methane Hydrocarbon )	0	-
HC-TOTAL ( Total Hydrocarbon )	0	-
METHANE ( CH4 - Methane )	0	-
MFR FE ( Manufacturer Fuel Economy )	0	0
NMOG ( Non-methane organic gas (California) )	0	-
NOX ( Nitrogen Oxide )	0	-
START-SOC ( System Start State of Charge ) <i>Amp Watt-hours</i>	15.69	-

UDDS/HIGHWAY/US06 Bag/Phase Number 6

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value
ACT-DISTANCE ( Actual Distance Driven (miles) )	7.455	-
AMP-HRS ( Integrated Amp-hours )	23.8	--
AS-VOLT ( Average System Voltage )	353.28	--
CO ( Carbon Monoxide )	0	-
END-SOC ( System End State of Charge ) <i>Amp Watt-hours</i>	23.8	-
FE BAG 1 ( Bag 1 Fuel Economy )	0	0
FE BAG 2 ( Bag 2 Fuel Economy )	0	0
HC-NM ( Non-methane Hydrocarbon )	0	-
HC-TOTAL ( Total Hydrocarbon )	0	-
METHANE ( CH4 - Methane )	0	-
MFR FE ( Manufacturer Fuel Economy )	0	0
NMOG ( Non-methane organic gas (California) )	0	-
NOX ( Nitrogen Oxide )	0	-
START-SOC ( System Start State of Charge ) <i>Amp Watt-hours</i>	19.71	-

UDDS/HIGHWAY/US06 Bag/Phase Number 7

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value
ACT-DISTANCE ( Actual Distance Driven (miles) )	7.452	-
AMP-HRS ( Integrated Amp-hours )	27.92	-
AS-VOLT ( Average System Voltage )	347.83	-
CO ( Carbon Monoxide )	0	-
END-SOC ( System End State of Charge ) <i>Amp Watt-hours</i>	27.92	-
FE BAG 1 ( Bag 1 Fuel Economy )	0	0
FE BAG 2 ( Bag 2 Fuel Economy )	0	0
HC-NM ( Non-methane Hydrocarbon )	0	-
HC-TOTAL ( Total Hydrocarbon )	0	-
METHANE ( CH4 - Methane )	0	-
MFR FE ( Manufacturer Fuel Economy )	0	0
NMOG ( Non-methane organic gas (California) )	0	-
NOX ( Nitrogen Oxide )	0	-
START-SOC ( System Start State of Charge ) <i>Amp Watt-hours</i>	23.8	-

UDDS/HIGHWAY/US06 Bag/Phase Number 8

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value

*Cumulative**Cumulative**Cumulative*

*Cumulative*

ACT-DISTANCE ( Actual Distance Driven (miles) )	7.458	-
AMP-HRS ( Integrated Amp-hours )	30.29	--
AS-VOLT ( Average System Voltage )	343.39	--
CO ( Carbon Monoxide )	0.644	-
END-SOC ( System End State of Charge Amp Watt-hours )	30.29	-
FE BAG 1 ( Bag 1 Fuel Economy )	96.4	96.4
FE BAG 2 ( Bag 2 Fuel Economy )	0	0
HC-NM ( Non-methane Hydrocarbon )	0.009	-
HC-TOTAL ( Total Hydrocarbon )	0.012	--
METHANE ( CH4 - Methane )	0.003	-
MFR FE ( Manufacturer Fuel Economy )	0	0
NMOG ( Non-methane organic gas (California) )	0.0094	-
NOX ( Nitrogen Oxide )	0.013	-
START-SOC ( System Start State of Charge Amp Watt-hours )	27.92	-

UDDS/Highway/US06 Bag/Phase Number 9

*Cumulative*

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value
ACT-DISTANCE ( Actual Distance Driven (miles) )	7.454	-
AMP-HRS ( Integrated Amp-hours )	30.36	--
AS-VOLT ( Average System Voltage )	341.28	--
CO ( Carbon Monoxide )	1.001	-
END-SOC ( System End State of Charge Amp Watt-hours )	30.36	-
FE BAG 1 ( Bag 1 Fuel Economy )	51	51
FE BAG 2 ( Bag 2 Fuel Economy )	0	0
HC-NM ( Non-methane Hydrocarbon )	0.004	-
HC-TOTAL ( Total Hydrocarbon )	0.007	--
METHANE ( CH4 - Methane )	0.003	-
MFR FE ( Manufacturer Fuel Economy )	0	0
NMOG ( Non-methane organic gas (California) )	0.0042	-
NOX ( Nitrogen Oxide )	0.016	-
START-SOC ( System Start State of Charge Amp Watt-hours )	30.2	-

**Verify-Calculated Fields**

System Miles 5038

**Fuel Economy**

Unrounded Unadjusted Fuel Economy	-	Rounded Unadjusted Fuel Economy	-
Unrounded Adjusted Fuel Economy	-	Rounded Adjusted Fuel Economy	-

**CREE / OPT-CREE**

Unrounded Unadjusted CREE	-	Rounded Unadjusted CREE	-
Unrounded Adjusted CREE	-	Rounded Adjusted CREE	-
Unrounded Unadjusted OPT-CREE	-	Rounded Unadjusted OPT-CREE	-
Unrounded Adjusted OPT-CREE	-	Rounded Adjusted OPT-CREE	-

**Manufacturer Test Comments**

150K CD EMIS TEST

[View Related Confirmatory Test Decision Information](#)



## 2014 ACCORD PLUG-IN HYBRID

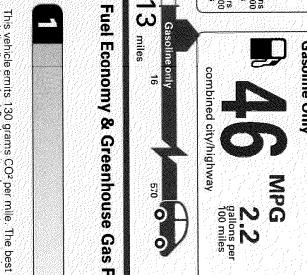
EXT: WHITE ORCHID P.  
INT: GRAY  
ENGINE NUMBER: LF1A1-0000101

Manufacturer's  
Suggested  
Retail Price  
**\$39,780.00**

Full Tank of Fuel  
No Charge

KEY STANDARD FEATURES  
Bluetooth HandsFreeLink  
USB Audio Interface  
Rearview Camera  
Side Curtain Airbags with  
Rollover Sensor

Driving Range  
Electricity + Gasoline  
Combined city/highway  
0 miles  
All Electric Range = 0 - 18 miles



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**PARTS CONTENT INFORMATION**  
FOR VEHICLES IN THIS CARLINE  
U.S./Canadian Parts Content: **0 %**  
Major Sources of Foreign Parts Content:  
**JAPAN 95 %**

NOTE: Parts content does not include  
final assembly, distribution or other  
non-parts costs.

License and title fees, state and local taxes and  
dealer options and accessories are not included  
in the manufacturer's suggested retail price.

### GOVERNMENT 5-STAR SAFETY RATING

Not Rated

Overall Vehicle Score

Not Rated

Based on the combined ratings of frontal, side and rollover.  
Should ONLY be compared to other vehicles of similar size and weight.

Frontal Crash	Driver	Not Rated
Based on the risk of injury in a frontal impact. Should ONLY be compared to other vehicles of similar size and weight.	Passenger	Not Rated
Side Crash	Front seat	Not Rated
Based on the risk of injury in a side impact.	Rear seat	Not Rated

Not Rated

Rollover  
Based on the risk of rollover in a single vehicle crash.

Star Ratings range from 1 to 5 stars ("\*\*\*\*") with 5 being the highest.

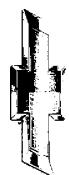
Source: National Highway Traffic Safety Administration (NHTSA)  
[www.safercar.gov](http://www.safercar.gov) or 1-888-327-4236

This vehicle is equipped with a front bumper of a type that has been tested at an  
impact speed of 2.5 miles per hour, and a rear bumper of a type that has been  
tested at an impact speed of 5 miles per hour, resulting in no damage to the  
vehicle's body and safety systems and minimal damage to the bumper and  
attachment hardware. "Minimal damage to the bumper" means minor cosmetic  
damage that can be repaired with the use of common repair materials and without  
replacing any parts. The stronger the bumper, the less likely the vehicle will require  
repair after a low-speed collision. This vehicle exceeds the current federal bumper  
standard of 2.5 miles per hour.

CERTIFICATION-PRODUCT LEG  
M.S.: 500 2C 8A  
ORIG. DLR: 99EA22  
REF NO.: EA22  
TORRANCE, CA 90501  
HN CODE: HN-XXXX  
EMISSION: 50 STATE  
CONTROL NO: 375405  
PORT OF ENTRY: RICHMOND  
SHIP #: RICHMOND  
DELIVERY POINT: RICHMOND  
ROW/SPACE:  
TRANS METHOD: TRANSPORTATION  
VIN: JHMCR5F7#EC000722



\*HSC 39037-05 Low-Emission Motor Vehicle\*



**CHEVROLET** 2014 CHEVROLET VOLT

EXTERIOR:  
INTERIOR:

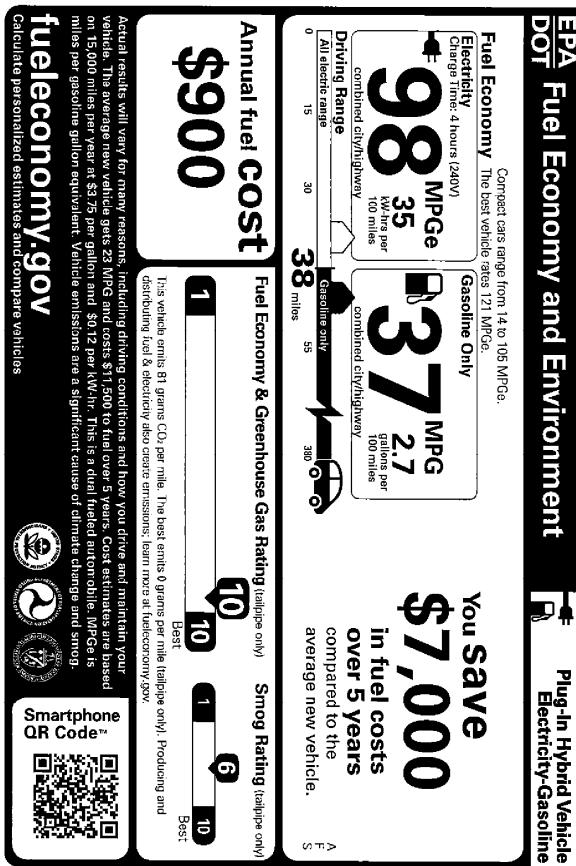
# THIS IS A TEST LABEL

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► PULL THIS STRIP TO EXPOSE ADHESIVE

**THIS VEHICLE IS NOT FOR SALE, NOR SHOULD IT BE DISPLAYED UNTIL A MANUFACTURER'S PRICE LABEL WITH COMPLETE SUGGESTED RETAIL PRICE INFORMATION IS AFFIXED.**

**THIS LABEL IS AFFIXED FOR SHIPPING PURPOSES ONLY BECAUSE COMPLETE VEHICLE PRICING INFORMATION WAS NOT AVAILABLE AT TIME OF SHIPMENT.**



GOVERNMENT 5-STAR SAFETY RATINGS		PARTS CONTENT INFORMATION
<b>FOR VEHICLES IN THIS CARLINE:</b> U.S./CANADIAN PARTS CONTENT: 45% MAJOR SOURCES OF FOREIGN PARTS CONTENT: JAPAN 17% KOREA 19%		<small>NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL ASSEMBLY, DISTRIBUTION, OR OTHER NON-PARTS COSTS.</small>
FOR THIS VEHICLE: FINAL ASSEMBLY POINT: DETROIT, MI U.S.A.	ENGINE: UNITED STATES TRANSMISSION (ELECTRIC) DRIVE UNIT: JAPAN	<small>The label has been applied pursuant to section 5202 of the Energy Policy Act of 2005. Do not remove prior to delivery to the consumer. This label is not a substitute for the owner's manual or other documentation. Pre-delivery service does not include dealer installed options, factory or dealer installed equipment, or parts fees above.</small>
Source: National Highway Traffic Safety Administration (NHTSA) <a href="http://www.safercar.gov">www.safercar.gov</a> or 1-888-327-4236		

<b>OnStar</b>	<b>Equipped with the safety and connectivity of OnStar.</b>
	<small>Push your blue button or visit <a href="http://onstar.com">onstar.com</a> for details.</small>
<small>SUBJECT TO CHANGE. SALES CODE: N FINAL ASSEMBLY: U.S.A. DETROIT, MI U.S.A.</small>	<small>© 2014 General Motors LLC GM012022-05/17/2013</small>
<small>VIN 1G1RDSE4TEU104679 DEALER TO WHOM DELIVERED GENERAL MOTORS LLC 3300 GM RD, BLDG 12 MC 483-312-00 MILFORD, MI 48380-3727</small>	

# EPA DOT Fuel Economy and Environment

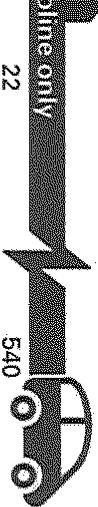
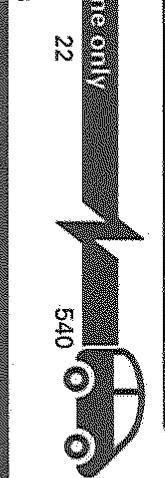
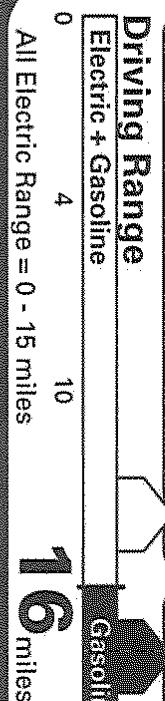
Plug-In Hybrid Vehicle  
Electricity-Gasoline

Fuel Economy Large Cars range from 14 to 29 MPG. The best vehicle rates 119 MPGe.

Electricity + Gasoline  
Charge Time: 3 hours (240V)

 **50** MPG  
0.5 gallons per 100 miles  
kW-hrs per 100 miles

 **25** MPG  
4.0 gallons per 100 miles



## Annual fuel cost

**\$1,850**

MPG  **8**

CO<sub>2</sub>  **9**

10 Best

11  **5**

10 Best

Fuel Economy & Greenhouse Gas Rating (tailpipe only)

Smog Rating (tailpipe only)

**\$2,250**  
in fuel costs  
over 5 years  
compared to the  
average new vehicle.

This vehicle emits 206 grams CO<sub>2</sub> per mile. The best emits 0 grams per mile (tailpipe only). Producing and distributing fuel also create emissions; learn more at [fueleconomy.gov](http://fueleconomy.gov).

Actual results will vary for many reasons, including driving conditions and how you drive and maintain your vehicle. The average new vehicle gets 23 MPG and costs \$11,500 to fuel over 5 years. Cost estimates are based on 15,000 miles per year \$3.75 per gallon and \$0.12 per kW-hr. This is a dual fueled automobile. MPGe is miles per gasoline gallon equivalent. Vehicle emissions are a significant cause of climate change and smog.

**fueleconomy.gov**

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Smartphone QR Code



# EPA Fuel Economy and Environment

Plug-in Hybrid Vehicle  
Electricity-Gasoline

Fuel Economy Two Seaters range from 10 to 107 MPG. The best vehicle rates 119 MPGe.

**Electricity**  
Charge Time: 3 hours (240V)

**Gasoline Only**

**67** MPGe  
kW-hrs per  
100 miles

**22** MPG  
gallons per  
100 miles



in fuel costs  
over 5 years  
compared to the  
average new vehicle.

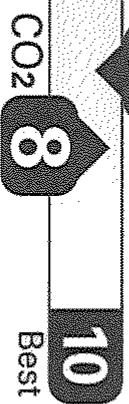
**\$750**

## Annual fuel Cost

**\$2,050**

MPG

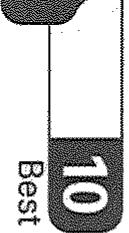
**7**



Best

CO<sub>2</sub>

**8**



Best

**10**

Best

**5**

Best

**10**

Best

## Fuel Economy & Greenhouse Gas Rating (tailpipe only)

## Smog Rating (tailpipe only)

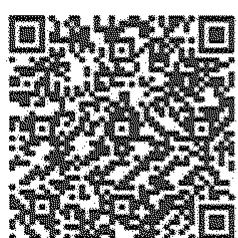
This vehicle emits 277 grams CO<sub>2</sub> per mile. The best emits 0 grams per mile (tailpipe only). Producing and distributing fuel also create emissions; learn more at [fuelconomy.gov](http://fuelconomy.gov).

Actual results will vary for many reasons, including driving conditions and how you drive and maintain your vehicle. The average new vehicle gets 24 MPG and costs \$11,000 to fuel over 5 years. Cost estimates are based on 15,000 miles per year \$3.80 per gallon and \$0.12 per kW-hr. This is a dual fueled automobile. MPGe is miles per gasoline gallon equivalent. Vehicle emissions are a significant cause of climate change and smog.

**fuelconomy.gov**

Calculate personalized estimates and compare vehicles

Smartphone  
QR Code



# 2014 MY X12G FE label value

1	Comparable Class	Midsized cars	11	Annual fuel cost (US\$/year)	550
2	Fuel economy range from xx to xx MPGe	from 13 to 114	12	Fuel economy/GHG rating	10
3	The best vehicle	124	13	Smog rating	10
4	Combined Fuel economy (MPGe)	114	14	This vehicle CO2	0
5	City Fuel economy (MPGe)	126	15	Best CO2	0
6	Highway Fuel economy (MPGe)	101	16	Average new vehicle (MPG)	23
7	Energy consumption (kW-hrs per 100miles)	30	17	Average 5 year fuel cost	11,500
8	Fuel savings - increase (US\$/5years)	SAVE \$8,750	18	Miles per year	15,000
9	Driving range (miles)	84	19	Fuel cost \$ per kWhr	0.12
10	Charge time (hours)	5(for 6.6KWcharger), 8(for 3.6KWcharger)	20	QR Code	901

The diagram illustrates the relationship between the table values and the various components of the vehicle's fuel economy label. The components are numbered 1 through 20:

- 1**: Comparable Class (Midsized cars) corresponds to the "Environment" section of the label.
- 2**: Fuel economy range from 13 to 114 MPGe corresponds to the "Fuel Economy & Greenhouse Gas Emissions" section.
- 3**: The best vehicle (124) corresponds to the "Smog Rating" section.
- 4**: Combined Fuel economy (114 MPGe) corresponds to the "Fuel Economy" section.
- 5**: City Fuel economy (126 MPGe) corresponds to the "Fuel Economy" section.
- 6**: Highway Fuel economy (101 MPGe) corresponds to the "Fuel Economy" section.
- 7**: Energy consumption (30 kW-hrs per 100miles) corresponds to the "Fuel Economy & Greenhouse Gas Emissions" section.
- 8**: Fuel savings - increase (SAVE \$8,750 US\$/5years) corresponds to the "Annual fuel COST" section.
- 9**: Driving range (84 miles) corresponds to the "Driving Range" section.
- 10**: Charge time (5 hours for 6.6KW charger, 8 hours for 3.6KW charger) corresponds to the "Charge Time" section.
- 11**: Annual fuel COST (\$600) corresponds to the "Annual fuel COST" section.
- 12**: Fuel Economy & Greenhouse Gas Emissions (14) corresponds to the "Fuel Economy & Greenhouse Gas Emissions" section.
- 13**: Smog Rating (10) corresponds to the "Smog Rating" section.
- 14**: This vehicle CO2 (15) corresponds to the "CO2" section.
- 15**: Best CO2 (10) corresponds to the "CO2" section.
- 16**: Fuel economy range from 13 to 114 MPGe corresponds to the "Fuel Economy" section.
- 17**: Smog rating (10) corresponds to the "Smog Rating" section.
- 18**: Annual fuel COST (\$600) corresponds to the "Annual fuel COST" section.
- 19**: Fuel Economy & Greenhouse Gas Emissions (14) corresponds to the "Fuel Economy & Greenhouse Gas Emissions" section.
- 20**: QR Code corresponds to the "QR Code" section.

**Label Components:**

- EPA DOT Fuel Economy Environment**: Includes "Electric Vehicle".
- Fuel Economy**: Shows 114 MPGe (city: 126, hwy: 101).
- Driving Range**: Shows 84 miles.
- Charge Time**: Shows 5 hours (6.6KW) or 8 hours (3.6KW).
- Annual fuel COST**: Shows \$600.
- Fuel Economy & Greenhouse Gas Emissions**: Shows 14 (MPGe).
- Smog Rating**: Shows 10 (Batt).
- Smartphone QR Code**: Shows a QR code.
- Actual results will vary for many reasons, including driving conditions and how you drive and maintain your vehicle. The average new vehicle gets 22 MPG and costs \$7,600 to fuel over 5 years. Cost estimates are based on 12,000 miles per year at \$3.12 per kWhr. MPGe is miles per gasoline gallon equivalent. Vehicle emissions are a significant cause of climate change. 1 smog.**
- This vehicle qualifies for California CO2 credit. The label reflects 3 years of driving data. Details not available yet.**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]; Wehrly, Linc[wehrly.linc@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Ott, Franz[Ott.Franz@epa.gov]; Dalton, Joel[Dalton.Joel@epa.gov]; French, Roberts[french.roberts@epa.gov]; Good, David[good.david@epa.gov]  
**Cc:** Ex. 7 @volkswagen.de  
**From:** Ex. 7  
**Sent:** Wed 7/9/2014 5:47:23 PM  
**Subject:** RE: VW PHEV label calculation and BEV testing  
PHEV BEV VW EPA Meeting 07 14.pdf

To all:

Attached please find an updated copy of the presentation material for tomorrow's meeting. Most of the information is the same as distributed with the meeting invitation, however, some clarification has been made. Questions on the topics covered are found at the bottom of the slides. In addition, Slide 9 (new) includes some specific test-related questions.

You will note that the slides pertaining to the wall box for EV charging have been removed, since we believe that our questions have been answered. We will be bringing a wall box and discussing the installation for forthcoming testing. We also look forward to seeing the laboratory's charge monitoring set-up.

Best regards,

Ex. 7

## Ex. 7

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone:

Cell: (2

E-Mail:

## Ex. 7

-----Original Appointment-----

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]

**Sent:** Friday, June 27, 2014 2:11 PM

**To:** Snyder, Jim; Wehrly, Linc; Wright, DavidA; Ott, Franz; Dalton, Joel; French, Roberts; Kata, Leonard (EEO); Johnson, Stuart (EEO); Good, David; Thomas, Richard (EEO); Schlueter, Hannah (EASZ/1); Sigelko, Jenny (EEO)

**Cc:** Tamborra, Nick (EEO)

**Subject:** VW PHEV label calculation and BEV testing

**When:** Thursday, July 10, 2014 9:30 AM-10:30 AM (UTC-05:00) Eastern Time (US & Canada).

**Where:** AA-Room-Office-N66-ConfRoom/AA-OTAQ-OFFICE

When: Thursday, July 10, 2014 9:30 AM-10:30 AM (GMT-05:00) Eastern Time (US & Canada).  
Where: AA-Room-Office-N66-ConfRoom/AA-OTAQ-OFFICE

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*

<< File: 2015 PHEV calculations \_Berechnungsvorlage\_02.pptx >>

**From:** Snyder, Jim  
**Required Attendees:** Wehrly, Linc; Wright, DavidA; Ott, Franz; Dalton, Joel; French, Roberts; **Ex. 7** Good, David  
**Optional Attendees:** **Ex. 7**  
**Location:** AA-Room-Office-N66-ConfRoom/AA-OTAQ-OFFICE  
**Importance:** Normal  
**Subject:** VW PHEV label calculation and BEV testing  
**Start Date/Time:** Thur 7/10/2014 1:30:00 PM  
**End Date/Time:** Thur 7/10/2014 2:30:00 PM  
2015 PHEV calculations Berechnungsvorlage 02.pptx

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; chris.mccarthy@gm.com[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com]; tom.beierschmitt@tema.toyota.com[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; drm202@chrysler.com[drm202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; Yuhase, Nicole (L.)[nyuhase@ford.com]; Roxanne Loeffler[rloeffler@sae.org]; mark.a.theobald@gm.com[mark.a.theobald@gm.com]; Dalton, Joel[Dalton.Joel@epa.gov]; Ellies, Ben[ellies.ben@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Alson, Jeff[alson.jeff@epa.gov]  
**From:** Wright, DavidA  
**Sent:** Wed 6/18/2014 8:03:02 PM  
**Subject:** SAE J3066 Task Force Meeting Agenda and Draft Minutes from May 8 Meeting  
[Agenda J3066 Task Force June 19 2014.docx](#)  
[J3066 Task Force Draft Minutes 05082014.docx](#)

Attached are the meeting agenda for tomorrow's Task Force meeting along with the draft minutes from the May 8 Task Force meeting. Both documents have also been uploaded to the SAE Standards Works task force work area. Tomorrow's meeting will take place at the EPA offices at 2000 Traverwood, Ann Arbor, MI 48105. The meeting will begin at 1 pm.

Regards,

David

David A. Wright  
Light-Duty Vehicle Center, Compliance Division  
National Vehicle and Fuel Emissions Laboratory  
Phone: (734) 214-4467  
E-mail: wright.davida@epa.gov



## **AGENDA**

### **Light-Duty Vehicle Performance Measurement Standards Committee, J3066 Task Force**

Chair – J. Glodich

Secretary – N. Yuhase

Thursday, June 19, 2014, 1:00 – 3:00 PM EDT

EPA Office of Transportation and Air Quality, 2000 Traverwood Drive, Ann Arbor, MI 48105  
(Office Building)

#### **1. Welcome and Introductions**

At the beginning of each meeting the chairman must read the SAE Anti-Trust Statement, the SAE Patent Disclosure Statement, the SAE Transparency Statement and the IP Statement provided below.

#### **2. Review of the Minutes from Last Meeting (May 22, 2014)**

#### **3. Membership Review**

#### **4. Liaison Activities**

(List activities with sponsor's name)

#### **5. Document(s) in Need of Five-Year Review**

**J3066: “On-Board Fuel Consumption and Measurement Reporting Standard”**

Sponsor: D. Wright

Review Draft J3066 Standard Text – D. Wright

Identification of any SAE standards which could be referenced for determining vehicle distance travelled – J. Glodich

Evaluating accuracy of existing DIC reported Fuel Economy – D. Wright

#### **6. Old Business**

#### **7. New Business**

#### **8. Next Meeting**

July 14, 2014 (proposed)

**IMPORTANT NOTE: Please be sure to provide the minutes and all attachments to the minutes in electronic format to SAE Staff.**

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**Patent Disclosure:** Each SAE Technical Committee or SAE working group member would be required to disclose at specified times during a development process all patents and patent applications that are owned, controlled or licensed by the member, member's employer or third party and that the member believes may become essential to the draft specification under development. The member would make this disclosure based on the member's good faith and reasonable inquiry. If SAE International receives a notice that a proposed SAE Technical Report may require the use of an invention claimed in a patent, the respective part of the SAE Technical Standards Board Policy will be followed.

**Transparency Statement:** This Technical Committee/Task Force is committed to transparency at the highest level. All topics are discussed in open meetings and decisions are consensus based (not unanimous). Committee/Task Force members are required to be vigilant in their efforts to monitor Committee/Task Force activities and decisions by actively participating in the Committee/Task Force. Any issues with the transparency of this Committee/Task Force not resolved by the Committee/Task Force Chairman should be brought to the attention of the SAE for resolution.

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As a participant in SAE Technical Committees, individuals agree that the collective work of the committee(s) is the property of SAE, and SAE is charged with its publication, dissemination, and protection.



## **Light-Duty Vehicle Performance Measurement Standards Committee**

### **J3066 On-Board Fuel Consumption Measurement and Reporting Task Force**

**Thursday, May 8, 2014  
1:00 – 3:00 PM**

**EPA, Office of Transportation and Air Quality, Ann Arbor**

These minutes are for the use of the committee and the J3066 task force.  
Unless authorized by SAE, they should not be published or further circulated.

#### **UNCONFIRMED MINUTES**

##### **Task Force Members Present**

T. Chang  
D. Pawlak  
D. Reid  
C. Paulina  
N. Okawa  
J. Glodich  
T. Beierschmitt  
N. Okawa (phone)  
P. Buller (phone)

##### **Task Force Members Absent**

R. McGavock  
C. McCarthy  
S. Conrad  
N. Yuhase  
M. Yassine  
W. Beggs  
C. Nevers  
J. Sigelko  
M. Duoba

##### **SAE Staff**

R. Loeffler (phone)

##### **Guests Present**

Y. Sato

- 1. Welcome and Introductions**
- 2. Review of the Minutes from Last Meeting (April 4, 2014)**
- 3. Membership Review**
- 4. Document Review**
  - 4.1 J3066 – On-Board Fuel Consumption Measurement and Reporting Standard
  - 2.1.1 Sponsor: David Wright
  - 2.1.2 Proposed to create a standardized method for calculating and reporting vehicle fuel consumption on the vehicle's information display. Manufacturer use of the standard would provide vehicle owners and testing organizations an option to compare consumption between vehicles knowing the calculation methodology is consistent.
  - 2.2 Reviewed Discussion Topics
  - 2.2.1 Distance Travelled Methodology.
    - 2.2.1.1 It appears that there maybe some relevant SAE standards as there is an SAE Odometer and Speedometer Standards Committee. J. Glodich offered to research the topic and report back to

the Task Force.

2.2.2 MPG and MPGe Calculation Methodologies.

2.2.2.1 Reviewed and discussed the initial draft of the MPG/MPGe Calculation Methodology. The question was raised for gasoline-fueled vehicles if the purge flow would need to be included in the delivered fuel calculation. Currently only the liquid fuel quantity is calculated. D. Wright committed to expanding the gasoline-fueled engine calculation methodology to include the generic 'speed-density' and 'mass air flow' equations.

2.2.2.2 R. Loeffler offered to provide (and has provided) a copy of the call for experts form which will allow the Task Force to request assistance with the detailed equations for calculating fuel consumption for other fuels.

2.2.3 Evaluating the Accuracy of the Proposed Calculation Methodologies.

2.2.3.1 Discussed using the federal test procedure (FTP), highway fuel economy (HFET), and US06 tests as a basis for comparing the on-board vehicle fuel consumption display. The on-board fuel consumption display is reset before the test and the fuel economy is recorded at the completion of each test. The on-board displayed fuel economy recorded at the end of each test is compared to the fuel economy calculated using the carbon-balance method from the exhaust emissions test. D. Pawlak indicated they had begun testing vehicles using this procedure. It was suggested that EPA could use this method as part of the on-going surveillance testing of manufacturer's vehicles. These data could be used to determine what if any significant differences exist between the different manufacturers and results obtained during emission testing.

2.2.3.2 A discussion ensued regarding developing a database of test results which would be compiled but would not indicate the vehicle or manufacturer only the results of the testing. R. Loeffler indicated that SAE has a service which could be used for this task. R. Loeffler provided D. Wright with a powerpoint document describing the service.

2.2.3.3 It was also discussed that the standard could include an option for a manufacturer to use their own method as long as the method used would correlate within a given percentage of the fuel economy measured during the FTP, HFET, and US06 carbon balance fuel economy results.

2.2.4. Drive Quality Metric.

2.2.5 Draft J3066 Standard Text.

2.2.5.1 R. Loeffler has provided to D. Wright the new template for the J3066 standard and a copy of the SAE Style Manual. D. Wright has committed to beginning a draft of the standard and a write-up of the purpose.

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; William Beggs[william.beggs@gm.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; Yuhase, Nicole (L.)[nyuhase@ford.com]; patrick.buller@volvocars.com[patrick.buller@volvocars.com]; chris.mccarthy@gm.com[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com]; tom.beierschmitt@tema.toyota.com[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; drm202@chrysler.com[drm202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; mduoba@anl.gov[mduoba@anl.gov]; mark.a.theobald@gm.com[mark.a.theobald@gm.com]; Dalton, Joel[Dalton.Joel@epa.gov]; Ellies, Ben[ellies.ben@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Alson, Jeff[alson.jeff@epa.gov]  
**Cc:** Roxanne Loeffler[rloeffler@sae.org]  
**From:** Wright, DavidA  
**Sent:** Thur 5/15/2014 8:00:27 PM  
**Subject:** J3066 Task Force May 22 Meeting Notice and Agenda  
Meeting Notice 05 22 2014 LDVPM[1].docx  
Agenda J3066 Task Force 5 22 2014.docx

Attached are the meeting notice and agenda for the next meeting of the J3066 Task Force. The initial proposed draft MPG/MPGe calculation method can be found on the task force web page <http://www.sae.org/servlets/works/postDiscussion.do?comtID=TEVL DVPM&docID=J3066&inputPage=showA>

Let me know if you are unable to access the task force web page and I can provide you a copy of the draft. Also, let me know if you have any questions or comments regarding the next meeting or the current draft.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)





J3066 Task Force - On-Board Fuel Consumption Measurement & Reporting Standard  
May 22, 2014  
1:00 pm – 3:00 pm EDT  
Location: EPA Office of Transportation & Air Quality  
2000 Traverwood Drive, Ann Arbor, MI 48105 (Office Building)  
WebEx/Teleconference Available

---

## WebEx Meeting Information

Contact: R. Loeffler [rloeffler@sae.org](mailto:rloeffler@sae.org) (248) 273-2457

To add this meeting to your calendar program (for example Microsoft Outlook), click this link:  
<https://sae.webex.com/sae/j.php?MTID=m6b6fb5356571c99b303a9138c4c77f6a>

Topic: J3066 Task Force Meeting-On-Board Fuel Consumption Measurement Reporting Standard

Date: Thursday, May 22, 2014

Time: 1:00 pm, Eastern Daylight Time (New York, GMT-04:00)

**Meeting Number:** 653 660 498

**Meeting Password:** [REDACTED]

---

To join the online meeting (Now from mobile devices!)

1. Go to <https://sae.webex.com/sae/j.php?MTID=m1e8f26cac778548ba0f0646ad73f24ae>
2. If requested, enter your name and email address.
3. If a password is required, enter the meeting password: [REDACTED]
4. Click "Join".

To view in other time zones or languages, please click the link:

<https://sae.webex.com/sae/j.php?MTID=mcc0ca00bf169c880d2fa0383a718a7bf>

---

To join the audio conference only

**Call-in toll-free number (US/Canada): 1-866-469-3239**

Call-in toll number (US/Canada): 1-650-429-3300

Global call-in numbers: <https://sae.webex.com/sae/globalcallin.php?serviceType=MC&ED=236898917&tollFree=1>

Toll-free dialing restrictions: [http://www.webex.com/pdf/tollfree\\_restrictions.pdf](http://www.webex.com/pdf/tollfree_restrictions.pdf)

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Access code: [REDACTED]8

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For assistance

- 
1. Go to <https://sae.webex.com/sae/mc>
  2. On the left navigation bar, click "Support".

**IMPORTANT NOTICE:** This WebEx service includes a feature that allows audio and any documents and other materials exchanged or viewed during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to the recording, discuss your concerns with the meeting host prior to the start of the recording or do not join the session. Please note that any such recordings may be subject to discovery in the event of litigation.



## AGENDA

### Light-Duty Vehicle Performance Measurement Standards Committee, J3066 Task Force

Chair – J. Glodich

Secretary – N. Yuhase

Thursday, May 22<sup>nd</sup>, 2014

1:00-3:00 PM EDT

EPA Office of Transportation and Air Quality, 2000 Traverwood Drive, Ann Arbor 48105  
(Office Building)

#### 1. Welcome and Introductions

#### 2. Review of the Minutes from Last Meeting (April 4, 2014)

#### 3. Membership Review

#### 4. Document Review

#### J3066: "On-Board Fuel Consumption and Measurement Reporting Standard"

- Sponsor: D. Wright
- Review Proposed Draft MPG/MPGe Calculation Method
  - Distance travelled methodology (Do any relevant SAE standards exist)
  - Liquid dedicated fuel calculation methodology (Diesel, Gasoline, E85, M85)
  - Gaseous dedicated fuel calculation methodology (CNG, LPG, Hydrogen)
  - Electricity dedicated fuel calculation methodology (Electricity)
  - Calculation method for vehicles using more than one fuel (E85 Flexible Fuel Vehicles, Gasoline/CNG, Gasoline/LPG, Diesel/CNG, Plug-In Hybrid Electric Vehicles using Electricity and Liquid Fuel, others?)
- Evaluating the accuracy of the proposed calculation methodology (Basis for the accuracy determination – replicate regulated test MPG value; or, compare calculation to on-road fuel consumption procedure, SAE J1082 – Fuel Economy Measurement Road Procedure).
- Drive Quality Metric
  - Current methods (ECO telltales) used to inform driver behavior.
- Draft J3066 Standard Text

#### 5. Next Meeting

- June 19, 2014 (proposed)

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**Patent Disclosure:** Each SAE Technical Committee or SAE working group member would be required to disclose at specified times during a development process all patents and patent applications that are owned, controlled or licensed by the member, member's employer or third party and that the member believes may become essential to the draft specification under development. The member would make this disclosure based on the member's good faith and reasonable inquiry. If SAE International receives a notice that a proposed SAE Technical Report may require the use of an invention claimed in a patent, the respective part of the SAE Technical Standards Board Policy will be followed.

**Transparency Statement:** This Technical Committee/Task Force is committed to transparency at the highest level. All topics are discussed in open meetings and decisions are consensus based (not unanimous). Committee/Task Force members are required to be vigilant in their efforts to monitor Committee/Task Force activities and decisions by actively participating in the Committee/Task Force. Any issues with the transparency of this Committee/Task Force not resolved by the Committee/Task Force Chairman should be brought to the attention of the SAE for resolution.

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As a participant in SAE Technical Committees, individuals agree that the collective work of the committee(s) is the property of SAE, and SAE is charged with its publication, dissemination, and protection.

**To:** patrick.buller@volvocars.com[patrick.buller@volvocars.com];  
Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com];  
chris.mccarthy@gm.com[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com];  
tom.beierschmitt@tema.toyota.com[tom.beierschmitt@tema.toyota.com];  
mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-  
motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-  
motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris  
Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William  
Beggs[william.beggs@gm.com]; drm202@chrysler.com[drm202@chrysler.com];  
Jenny.Sigelko@vw.com[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com];  
mduoba@anl.gov[mduoba@anl.gov]; mark.a.theobald@gm.com[mark.a.theobald@gm.com]; Dalton,  
Joel[Dalton.Joel@epa.gov]; Ellies, Ben[ellies.ben@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Wright, DavidA  
**Sent:** Wed 5/7/2014 1:44:26 PM  
**Subject:** Proposed Draft MPG/MPGe Calculation Method added to J3066 Subcommittee Work Area  
Draft\_MPGe\_Calc\_Method\_8\_May\_14.docx

Attached to this e-mail is a copy of the initial draft document with a proposed calculation methodology for MPG/MPGe for the J3066 Standard. Please review this draft and you can begin providing me with comments. We will set the time and location for the next J3066 subcommittee meeting at tomorrow's committee meeting.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

## PROPOSED DRAFT

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# J3066 On-Board Fuel Consumption Measurement and Reporting Standard Subcommittee

## Draft MPG/MPGe Calculation Methodology

May 8, 2014

Vehicles using liquid fuels (gasoline and diesel) or a combination of liquid fuels (flexible fuel vehicles) will calculate and report miles per gallon (MPG). The proposed calculation methodology would be:

MPG =

The proposed distance travelled calculation will be a summation of the observed revolutions of the vehicles wheels. Factors affecting tire rolling radius and their impact on the distance calculation could reduce the accuracy of the distance travelled calculation. Potential factors include ambient temperature, tire pressure, and possibly tire characteristics.

The proposed delivered fuel calculation will be a summation of the individual fuel injections commanded by the fuel control system. The fuel mass injected will be converted to fuel volume. Factors affecting the actual fuel quantity injected will reduce the accuracy of the delivered fuel calculation. Possible factors affecting the fuel mass injected include the fuel properties, injector/fuel temperatures, and injector response.

Vehicles using gaseous fuels (CNG and Hydrogen) will calculate and report miles per gallon equivalent (MPGe). The distance travelled calculation for these vehicles will be the same method as described for vehicles using liquid fuels or a combination of liquid fuels.

The proposed fuel calculation for gaseous fuels would be a summation of the fuel delivered to the engine (or fuel cycle in the case of a hydrogen fuel cell vehicle) divided by the equivalent quantity of the gaseous fuel which has the same energy content as a gallon of gasoline. The quantity of fuel delivered will be characterized by the appropriate units for the control system

## PROPOSED DRAFT

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and converted to the gasoline gallon equivalent value. For CNG the gasoline gallon equivalent (GGE) value is 121.5 standard cubic feet per 40 CFR §600.002. The proposed MPGe calculation methodology for CNG would be:

MPGe =

The proposed delivered CNG value will be a summation of the individual injections of CNG commanded by the fuel control system. The quantity of CNG injected will be totaled and then multiplied by the appropriate GGE value. In the example above the CNG injections are calculated by volume and corrected to standard conditions.

Battery electric vehicles will calculate and report MPGe. The distance travelled calculation for electric vehicles will be the same method as described previously.

The proposed fuel calculation for electricity would be a summation of the dc electricity discharged by the traction battery. The proposed method would calculate dc discharge energy by summing the dc discharge voltage and current. The dc electrical energy will be converted using the gasoline gallon equivalent value for electricity, currently defined in CFR §600.002 as 33.705 kWh. This proposed method would not include any battery charging losses and as such would be greater than the MPGe value calculated using measured AC recharge energy.

MPGe =

Plug-in hybrid electric vehicles (PHEVs) will calculate and report MPGe. The distance travelled calculation for PHEVs will be the same as the method described previously.

The proposed fuel calculation for PHEVs would be a combination of two fuels, one of which would be electricity. For a gasoline-fueled PHEV the proposed equation would include the summation of the gasoline consumption combined with the electricity consumed converted to the gasoline gallon equivalent value.

MPGe =

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; patrick.buller@volvocars.com[patrick.buller@volvocars.com]; chris.mccarthy@gm.com[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com]; tom.beierschmitt@tema.toyota.com[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; Yuhase, Nicole (L. )[nyuhase@ford.com]; william.beggs@gm.com[william.beggs@gm.com]; drm202@chrysler.com[drm202@chrysler.com]; Jenny.Sigelko@vw.com[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; mduoba@anl.com[mduoba@anl.com]; Roxanne Loeffler[rloeffler@sae.org]  
**Cc:** Dalton, Joel[Dalton.Joel@epa.gov]; Ellies, Ben[ellies.ben@epa.gov]; Alson, Jeff[alson.jeff@epa.gov]; Wehrly, Linc[wehrly.linc@epa.gov]; French, Roberts[french.roberts@epa.gov]  
**From:** Wright, DavidA  
**Sent:** Thur 4/3/2014 5:32:45 PM  
**Subject:** J0366 Task Force Discussion Scope Outline  
J3066 Scope Discussion.doc

In case I run into difficulty arranging the webex for tomorrow's task force discussion I wanted to provide all of the interested task force members with an electronic copy of the outline I have drafted for our scoping discussion tomorrow.

This is my initial list of thoughts and look forward to input from the task force participants to expand upon the list and help with clarifying the scope.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov



## J3066 Scope Discussion Topics

### **Summary**

An SAE Standard, J3066, On-Board Fuel Consumption Measurement and Reporting is proposed to create a standardized method for calculating and reporting vehicle fuel consumption on a vehicle's information center. Manufacturer use of the standard would provide vehicle owners and testing organizations the option to compare the consumption between vehicles knowing the calculation methodology is consistent and without requiring any additional instrumentation.

### **Discussion Topics**

Should the standard be developed for all fuels and multi-fueled vehicles or should the standard be developed and applied to gasoline, diesel, electricity, and combinations of these three

What measurement value or values will be displayed on the information center:

- Fuel economy (MPG)
- Fuel consumption (gal/100 miles, kWh/100 miles)
- Equivalent fuel economy for alternative fuels (MPGe)

Is anyone aware of any testing performed to evaluate the accuracy of existing on-board measurement and display systems (perform fuel economy tests and reset and record the output of the vehicle display after the test, or other tests)

Should the standard include a drive energy metric – road load and inertia loading observed during vehicle operation

Should the standard include a drive quality metric – driver performance with respect to minimizing drive energy

Should the standard require the driver display correlate with the results from a standard vehicle fuel economy testing – or would this be performed as part of developing the proposed standard

**To:** Wehrly, Linc[wehrly.linc@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; French, Roberts[french.roberts@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Dalton, Joel[Dalton.Joel@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Mon 3/31/2014 4:57:15 PM  
**Subject:** RE: VW Off-Cycle GHG Credits Conference Call  
Agenda-33114.docx

To all:

Attached is an agenda for our telephone conversation.

Best regards,

**Ex. 7**

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**Ex. 7**

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone

Cell: (

E-Mail

**Ex. 7**

**From:** **Ex. 7**

**Sent:** Friday, March 21, 2014 1:57 PM

**To:** Wehrly, Linc (wehrly.linc@epa.gov); Snyder.jim@Epa.gov; French, Roberts (french.roberts@epa.gov); Wright, DavidA (Wright.DavidA@epa.gov); Dalton, Joel (Dalton.Joel@epa.gov)

**Subject:** VW Off-Cycle GHG Credits Conference Call

To all:

I have added some VW participants and included a call-in number for the EPA/VW call on March 31, 2014 at 1:00 p.m. I am not certain if all participants will see these additions or only the organizer (Jim Snyder). Therefore, the call-in information is provided below.

To join by telephone, call:

**Non-Responsive**

Conference ID: 4 [REDACTED]

My apology if this is a duplication.

Best regards,

**Ex. 7**

# **Ex. 7**

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone:

Cell: (2

E-Mail

# **Ex. 7**

U.S. Environmental Protection Agency / Volkswagen Group of America, Inc. Telephone Conference  
Off-Cycle GHG Credits  
March 31, 2014

1. Agenda
2. Introductions
3. Confirm the opportunity to carryback credits for Model years 2012 and 2013
4. Potential Off-Cycle Credits
  - a. High Efficiency Lighting
  - b. Active Aerodynamic Improvements
  - c. Engine Idle Start-Stop w/ heater
  - d. Engine Idle Start-Stop w/o heater
  - e. Active Transmission Warm-Up
  - f. Active Engine Warm-Up
  - g. Thermal Control Technologies – Glazing
  - h. Thermal Control Technologies – Active Seat Ventilation
  - i. Thermal Control Technologies – Reflective Surface Paint
5. Status of EPA's Review Process
6. Other

**To:** Wehrly, Linc[wehrly.linc@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; French, Roberts[french.roberts@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Dalton, Joel[Dalton.Joel@epa.gov]  
**From:** [redacted] Ex. 7  
**Sent:** Fri 3/21/2014 5:56:58 PM  
**Subject:** VW Off-Cycle GHG Credits Conference Call

To all:

I have added some VW participants and included a call-in number for the EPA/VW call on March 31, 2014 at 1:00 p.m. I am not certain if all participants will see these additions or only the organizer (Jim Snyder). Therefore, the call-in information is provided below.

To join by telephone, call:

**Non-Responsive**

Conference ID: [redacted] **Non-Responsive**

My apology if this is a duplication.

Best regards,

**Ex. 7**

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**Ex. 7**

## **Ex. 7**

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phon:

Cell:

E-Ma

# **Ex. 7**

**From:** Snyder, Jim  
**Required Attendees:** Wehrly, Linc; French, Roberts; Wright, DavidA; Dalton, Joel;  
Ex. 7  
**Location:** AA-Room-Office-C35-ConfRoom/AA-OTAQ-OFFICE  
**Importance:** Normal  
**Subject:** VW phone conference: discuss off-cycle GHG credits  
**Start Date/Time:** Mon 3/31/2014 5:00:00 PM  
**End Date/Time:** Mon 3/31/2014 6:00:00 PM

Hello Jim:

I would like to try again to schedule a VW/EPA conference call to have a preliminary discussion regarding off-cycle GHG credits.

Best regards,

Ex. 7

**To:** mb-nathan-hinderer [nathan.hinderer@daimler.com]; william.meschievitz@tema.toyota.com[william.meschievitz@tema.toyota.com]; tommy\_chang@ahm.honda.com[tommy\_chang@ahm.honda.com]; JRugge@subaru.com[JRugge@subaru.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; KhanF@NRD.NISSAN-USA.COM[KhanF@NRD.NISSAN-USA.COM]; Tobias Glas[tobias.glas@vw.com]; Peace O Uwague[peace.ouwague@bmwnaext.com]; rds116@chrysler.com[rds116@chrysler.com]; ghall12@jaguarlandrover.com[ghall12@jaguarlandrover.com]; rbarre20@volvocars.com[rbarre20@volvocars.com]; Beth Borland [bab11@chrysler.com]; Mark M Poll[mpoll1@ford.com]; christopher.cislo@gm.com[christopher.cislo@gm.com]; ross.gatzke@porsche.us[ross.gatzke@porsche.us]; balsip@suz.com[balsip@suz.com]; Lindsey Jeng[ljeng@hatci.com]  
**Cc:** Dave Barker[dba1@subaru.com]; peter\_meier@ahm.honda.com[peter\_meier@ahm.honda.com]; tom.beierschmitt@tema.toyota.com[tom.beierschmitt@tema.toyota.com]; drobertson@mazdausa.com[drobertson@mazdausa.com]; david.patterson@na.mitsubishi-motors.com[david.patterson@na.mitsubishi-motors.com]; yamaday@ntcna.nissan-usa.com[yamaday@ntcna.nissan-usa.com]; oliver.schmidt@vw.com[oliver.schmidt@vw.com]; Andrea.Antholzner@bmwna.com[Andrea.Antholzner@bmwna.com]; vvarjabe@jaguar.com[vvarjabe@jaguar.com]; vvarjabe@jaguarlandrover.com[vvarjabe@jaguarlandrover.com]; brian.fitzgerald@daimler.com[brian.fitzgerald@daimler.com]; gbuffali@volvocars.com[gbuffali@volvocars.com]; ml90@chrysler.com[ml90@chrysler.com]; tfagerma@ford.com[tfagerma@ford.com]; randall.c.harvey@gm.com[randall.c.harvey@gm.com]; David Geiger[david.geiger@porsche.us]; walter.lewis@porsche.us[walter.lewis@porsche.us]; luis.hernandez@suz.com[luis.hernandez@suz.com]; Tony D'Ambrosi[adambrosi@hatci.com]; Peavyhouse, Robert[Peavyhouse.Robert@epa.gov]; French, Roberts[french.roberts@epa.gov]; Wehrly, Linc[wehrly.linc@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Ball, Joel[ball.joel@epa.gov]; Anderson, Tom[Anderson.Tom@epa.gov]; Dalton, Joel[[Dalton.Joel@epa.gov]; Ott, William[ott.william@epa.gov]  
**From:** Good, David  
**Sent:** Fri 1/31/2014 6:37:05 PM  
**Subject:** RE: IUPV - Entering Greenhouse Gas data (CREE or OCREE, CH4) into the EPA Verify database; Verify changes, etc.

To all manufacturers IUPV contacts,

Please note that in Verify Release 13.1 (deployed Jan 24, 2014) that EPA has added two new Test Result/Emission Names which can be used in Verify's IUPV Module only. The new test result/emission names are "Combined CREE" and "Combined OPT-CREE."

Please begin using these IUPV emission names as soon as possible (and don't use the work-around method of entering IUPV combined CREE/OCREE data). [Thanks much for using the "work-around" method of entering combined CREE IUPV data over the past few months.] If you used the "work-around method" of entering CREE/OCREE data, it is not necessary to correct previously entered IUPV data using the new test result/emission names.

Please enter the appropriate Combined CREE or Combined OPT-CREE test results along with the appropriate Combined CREE or Combined OPT-CREE in-use standard, pass/fail results, etc. for the highway test only. As a reminder, individual in-use GHG standards for specific in-use vehicles are required to be included in the manufacturer's final CAFE/GHG model year report, ref. 40 CFR 86.1818-12(d); and 40 CFR 600.512-12(c)(11).

As of the first week in January, 2014, some manufacturers have not been entering CREE/OCREE data and/or CH4 data into Verify for 2012 IUPV tests. In addition, some manufacturers seem to be missing 2012 low mileage IUPV data for some of their 2012 test groups. Please double check on the status of your 2012 IUPV program and let Bill Pidgeon ([pidgeon.bill@epa.gov](mailto:pidgeon.bill@epa.gov)) and I know if your program is running late. I will try to send manufacturers with missing data a follow-up email message in the next few days.

#### Tips for entering IUPV data:

1. Please enter Combined CREE or Combined OPT-CREE test results (weighted 55% city and 45% highway) for the highway test procedure only.
2. Please do not enter both Combined CREE and Combined OPT-CREE values. Enter either CREE or OPT-CREE values which are consistent with the way you submitted data in your CAFE/GHG model year report for the applicable model year.
3. Please enter CH4 test results, standards, pass/fail results on the FTP test only.
4. Please enter N2O test results, standards, pass/fail results on the FTP test only if you actually measured N2O----e.g. don't enter the default 0.010 N2O values.

#### Reminders:

1. 2012 IUPV low mileage testing was required to be completed by Dec 31, 2013 and data submitted to EPA's Verify database prior to Jan 31, 2014, ref. 40 CFR 86.1845-04(b)(4) and 86.1847(b). EPA has extended the window in Verify to Feb 28, 2014 for reporting and correcting 2012 model year low mileage IUPV test data. Please contact Bill Pidgeon by email or at 734-214-4416 if you need to submit data to Verify after that date.
2. When entering IUPV data in Verify, please check your Verify mailbox to make sure that

the data was accepted by Verify.

Thanks much.

Please call contact me at 734-214-4450 or by email if you have any questions.

Dave

**To:** Good, David[good.david@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Fri 9/25/2015 6:25:21 PM  
**Subject:** Audi A3 e-tron ultra  
[monroney\(18\) A3 e-tron ultra.pdf](#)

Hi Dave;

As your requested, attached is a sample of the fuel economy label for the 2106 Audi A3 e-tron ultra. Please let me now if you have any concerns and that all the required data has been properly displayed. The factory has told me that it is a non-blended PHEV, I believe this point was already pointed out to EPA in an A3 e-tron presentation in early August.

Best regards,

Richard

Richard E. Thomas

Senior Emission Certification Specialist  
Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

LOC:  
Exterior:

Dealer Stock Status:  
Interior:

VIN: 8VAPTEST01EN00002  
Interior:

MODEL: 8VAP5PX 2016 Audi A3 Sportback 1.4T FWD e-tron S tronic  
2015268-TEST LABEL

# 2016 Audi A3 Sportback 1.4T FWD e-tron S tronic

Truth in Engineering



**STANDARD EQUIPMENT** (unless replaced by options)

**TECHNICAL**

- 1.4 TFSI®, 4 CYL, PHEV, 204hp / 256lb-ft, combined
- 6-speed S tronic transmission
- 17"-spoke-Y design wheels, 205/55 summer tires
- ESC (Electronic Stability Control) with secondary collision brake
- Disc brakes, ventilated front & solid rear discs
- ABS (Anti-lock brake system) with brake assist
- Electromechanical speed-sensitive power steering
- TPMS (tire pressure monitoring system)

## COMFORT/CONVENIENCE

- Panoramic sunroof w/ retractable sunshade
- Auto xenon plus headlights w/ LED DRLs & taillights
- Rain & light sensor
- Power-adjustable exterior mirrors
- 12-way power adjustable driver seat including lumbar adjustment
- Leather seating surfaces
- Dual-zone automatic climate control
- 3-spoke leather-wrapped multifunction steering wheel
- Audi sound system
- AM/FM/SD/USB/CD audio w/ SD card reader & aux-in
- Sirius® satellite radio (w/ three-month complimentary subscription)
- Navigation system
- iPhone integration system
- Parking system plus with rearview camera
- Mobile charging unit
- Audi drive select
- LED interior lighting package

## SAFETY/SECURITY

- Driver and front passenger advanced airbag supplemental restraint system
- Driver and front passenger knee airbags
- Driver and front-passenger seat-mounted thorax side airbags
- Side- and head-curtain airbags
- Driver 3-point safety belts with Automatic Locking Retractor (ALR), outboard 3-point safety belts with Automatic Locking Retractor (ALR), front passenger 3-point safety belt with Automatic Locking Retractor (ALR), front passenger 3-point safety belt with Automatic Locking Retractor (ALR), rear center 3-point safety belt with Automatic Locking Retractor (ALR), Lower Anchors and Tensioners for Children (LATCH) in rear
- Rear child safety lock system
- Anti-theft vehicle alarm system

## WARRANTY/Maintenance

4 years/50,000 miles whichever occurs first. New Vehicle limited warranty.

**USER'S SUGGESTED RETAIL PRICE**  
Sportback 1.4T FWD e-tron S tronic  
**OPTIONS**

\$

DRPOF  
Method

Method

## EPA Fuel Economy

DOT

DOE

FCC

NHTSA

SAFETY

IIHS

NHTSA

IIHS

**To:** [REDACTED] Ex. 7 [REDACTED]@vw.com]  
**Cc:** [REDACTED] Ex. 7 [REDACTED]@vw.com]; Good, David[good.david@epa.gov]  
**From:** Peavyhouse, Robert  
**Sent:** Tue 9/16/2014 1:59:46 PM  
**Subject:** RE: 2012 Volkswagen CAFE to include Porsche

**Ex. 7**

Go ahead and set the final status to yes and finish up the reports for VW.

I will start modifying the Porsche files to remove their CAFE production volumes.

Robert Peavyhouse  
Compliance Division  
U.S. EPA - OTAQ  
Phone: (734) 214-4814

**From:** [REDACTED] Ex. 7 [REDACTED]@vw.com]  
**Sent:** Tuesday, September 16, 2014 8:48 AM  
**To:** Peavyhouse, Robert  
**Cc:** [REDACTED] Ex. 7 [REDACTED] (EEO); Good, David  
**Subject:** RE: 2012 Volkswagen CAFE to include Porsche

Hi Bob;

I made that 2012 Jetta SportWagen footprint and target correction in Verify and to our calculation and we now have the same rounded CAFE standard. I reprocessed the 2012 Import Passenger Car CAFE this morning and we appear to agree with the Verify calculation. Please let me know if there are any other issues. If there are no issues, I will proceed with preparing a revised cover letter for the 2012 VWGoA CAFE reports and set the Verify CAFE/GHG final status indicator to yes.

Thanks for your help.

**Ex. 7**

**From:** Peavyhouse, Robert [mailto:[Peavyhouse.Robert@epa.gov](mailto:Peavyhouse.Robert@epa.gov)]  
**Sent:** Monday, September 15, 2014 2:33 PM  
**To:** Ex. 7 (EEO)  
**Cc:** Ex. 7 (EEO); Good, David  
**Subject:** RE: 2012 Volkswagen CAFE to include Porsche

**Ex. 7**

I have duplicated the footprint standard calculation for PV; Domestic, Import, and GHG.

The calculations are attached.

**Note that there are 3 footprints highlighted in yellow.**

2 footprints (both Tiguan) have been recalculated because they were originally calculated as trucks, and then submitted to a passenger car file.

1 footprint (Jetta SportWagen) has a target FE/Target GHG mismatch between VW and Verify.

Robert Peavyhouse  
Compliance Division  
U.S. EPA - OTAQ  
Phone: (734) 214-4814

**From:** Ex. 7 @vw.com]  
**Sent:** Monday, September 15, 2014 10:26 AM  
**To:** Peavyhouse, Robert  
**Cc:** Ex. 7 (EEO); Good, David  
**Subject:** RE: 2012 Volkswagen CAFE to include Porsche

Hello Bob;

I ran both the LDT and the Import Passenger Car 2012 Reports this morning. The LDT is fine and my internal CAFE calculation agrees with Verify exactly. The Import PC CAFE fleet agrees with the Verify calculation but there is a tenth of a MPG difference in the footprint based CAFE standard with Verify (VWGoA 33.6 MPG versus Verify 33.7 MPG). I suspect there is a difference in the Porsche carline footprint values used in verify versus the values that were provided to me by Porsche. I would like to verify those numbers with Ross and review the internal VWGoA calculation again unless you see where the differences might be.

I am available to talk if you have a few minutes today.

Thanks for making this a lot easier with those permission settings.

Thanks,

**Ex. 7**

**From:** Peavyhouse, Robert [mailto:[Peavyhouse.Robert@epa.gov](mailto:Peavyhouse.Robert@epa.gov)]  
**Sent:** Friday, September 12, 2014 2:07 PM  
**To:** **Ex. 7** (EEO)  
**Cc:** **Ex. 7** (EEO)  
**Subject:** RE: 2012 Volkswagen CAFE to include Porsche

**Ex. 7**

I have already setup all of the permissions for you to use Porsche's data. (Hopefully I haven't missed any)

I have included the 2 combined files. The CAFE files are left as-is. No changes, just combined. The GHG production volumes for Porsche have been cleared in both the footprint and model

type sections. It is my understanding that Porsche is still submitting GHG separate for 2012. I will generate 2 files for Porsche (GHG only, without CAFE) once we get the VW files done.

I have not re-calculated any total production volumes, standards, or fleet averages. I left them with VW values.

I would recommend just submitting and let Verify calculate those. Once the calculation reports are generated, we can verify the calcs.

I am about done for the day. If you can get them submitted today, I will take a look at them in Verify on Monday when I get in.

Robert Peavyhouse  
Compliance Division  
U.S. EPA - OTAQ  
Phone: (734) 214-4814

**From:** [redacted] Ex. 7 [redacted]@vw.com]  
**Sent:** Thursday, September 11, 2014 10:55 AM  
**To:** Peavyhouse, Robert  
**Cc:** Ross Gatzke; [redacted] Ex. 7 (EEO)  
**Subject:** 2012 Volkswagen CAFE to include Porsche

Hi Bob;

I received your voice message today and have the following. The 2012 model year the Volkswagen Group CAFE was filed under "VWX", the Volkswagen manufacturer code. With this email we wish to grant any permissions required by EPA to add the Porsche manufacturer code "PRX" to our Group for the processing of the 2012 Final CAFE under the VWX manufacturer code.

If you need anything else, please let me know.

Best regards,

[Ex. 7]

## Ex. 7

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone [Ex. 7]

Fax: [Ex. 7]

mailto:[Ex. 7]@VW.com

**To:** [REDACTED] **Ex. 6** @csc.com]  
**Cc:** Good, David[david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Thur 7/16/2015 12:56:26 PM  
**Subject:** 2016 Inactive Fuel Economy Labels Volkswagen

Hi [REDACTED] **Ex. 6**:

I have two more 2016 labels that need to change to inactive status in Verify. Volkswagen cancelled the manual 5-speed transmission for the 1.8L Jetta and 1.8L Passat, VGA label indexes #073 and #075 respectively. Please make these two 2016 label indexes inactive.

Best regards,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: Richard.Thomas@VW.com

**To:** Wehrly, Linc[wehrly.linc@epa.gov]; Good, David[good.david@epa.gov]  
**Cc:** [REDACTED] Ex. 7 [REDACTED] @vw.com; [REDACTED] **Ex. 7**  
[REDACTED] Ex. 7 [REDACTED] @vw.com]  
**From:** [REDACTED] Ex. 7 [REDACTED] (EEO)  
**Sent:** Mon 6/23/2014 7:19:09 PM  
**Subject:** RE: Testing Strategy Approval Request - Audi A8 Start/Stop Systems

Hello Linc,

yes you understood my question, but somehow we do not understand the logic in your answer.

Just left you a voicemail, can we set up a conference call/meeting tomorrow ?

Thank you

[REDACTED] **Ex. 7**

**From:** Wehrly, Linc [mailto:wehrly.linc@epa.gov]  
**Sent:** Montag, 23. Juni 2014 14:59  
**To:** [REDACTED] Ex. 7 [REDACTED] (EEO); Good, David  
**Cc:** [REDACTED] Ex. 7 [REDACTED] (EEO); [REDACTED] Ex. 7 [REDACTED] (EEO)  
**Subject:** RE: Testing Strategy Approval Request - Audi A8 Start/Stop Systems

Oliver,

I'm not sure that I fully understand your question, but I think you are asking whether VW can get 50% of the off-cycle credits for a start-stop system that "latches" or stays in the "last mode" of operation upon key-off. If that is the case, the answer is no. For fuel economy testing purposes, we allow a manufacturer to test in the predominant mode if they can establish a predominant mode. If there is no predominant mode (a latching system is not considered predominant), the manufacturer may harmonically (50/50) average the results of start-top engaged and start-stop disengaged. However, for GHG off-cycle credits, only start-stop systems that have been deemed to have a predominant mode are eligible for off-cycle credits.

Please let me know if I have misunderstood the nature of your question.

Thanks,

Linc

Linc Wehrly

Director, Light-Duty Vehicle Center

Compliance Division

Office of Transportation and Air Quality

United States Environmental Protection Agency

(734) 214-4286

[wehrly.linc@epa.gov](mailto:wehrly.linc@epa.gov)

**From:** [REDACTED] Ex. 7 [REDACTED] @vw.com]

**Sent:** Friday, June 20, 2014 7:49 AM

**To:** Good, David; Wehrly, Linc

**Cc:** [REDACTED] Ex. 7 (EEO); [REDACTED] Ex. 7 (EEO)

**Subject:** FW: Testing Strategy Approval Request - Audi A8 Start/Stop Systems

Hello David,

hello Linc,

thank you again for the good discussion Wednesday.

I have one more question for you:

In the mail below you granted us a factor of 50% of the Fuel Economy savings for a car that is equipped with a Stop-Start System in a "Last Mode" configuration.

In order to prepare the 2012/2013 Off Cycle application and for future planning of the roll out for Stop-Start would it be acceptable for you if we calculate with 50% of the according Off-Cycle credit value for each vehicle equipped with a "Last Mode" System ?

Thank you

**Ex. 7**

**Ex. 7**

Engineering and Environmental Office

**VOLKSWAGEN Group of America, Inc.**

3800 Hamlin Road  
Auburn Hills, MI 48326

Phone: [REDACTED] **Ex. 7**

Cell: [REDACTED] **Ex. 7**

FAX: [REDACTED] **Ex. 7**

E-Mail: [REDACTED] **Ex. 7**

**From:** David Good [<mailto:Good.David@epamail.epa.gov>]  
**Sent:** Thursday, May 31, 2012 2:58 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Jim Snyder; Kata, Leonard (EEO); Linc Wehrly; Stephen Healy; William Ott; DavidA Wright; Joel Dalton; Joel Ball  
**Subject:** Re: Testing Strategy Approval Request - Audi A8 Start/Stop Systems

Richard,

**Background:** In a May 8, 2012 meeting, VW/Audi staff presented EPA with a description of the stop/start

system and cylinder deactivation system for these 2013 Audi A8 vehicles. The vehicle is equipped with what you called "Last-mode functionality," where the last stop/start setting (enable/disable mode) is restored after stopping and restarting the vehicle. In other words, the stop/start button is "latched" when stopping and restarting the vehicle. Although I had a conflict on May 8, 2012 and didn't get to drive the vehicle, it's my understanding that the May 8, 2012 drive was acceptable to all EPA engineers who drove it (including both the stop/start feature and the cylinder deactivation feature of the vehicle).

Regarding your current request to perform one test for the Highway, SC03 and Cold FTP cycle (and two sets of FTP and US06 tests---with and without the stop/start system enabled), we believe that your request sounds reasonable to us, and it is hereby approved.

Please call or email me if you have questions about this email.

Regards

▼ "Thomas, Richard (EEO)" ---05/21/2012 09:02:46 AM---Hello Dave; After our visit with the demonstration 4.0L V8 Audi A8 on May 8th and equipped with cyl

From: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
To: David Good/AA/USEPA/US@EPA, Jim Snyder/AA/USEPA/US@EPA  
Cc: Linc Wehrly/AA/USEPA/US@EPA, "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
Date: 05/21/2012 09:02 AM  
Subject: Testing Strategy Approval Request - Audi Start/Stop Systems

---

Hello Dave;

After our visit with the demonstration 4.0L V8 Audi A8 on May 8th and equipped with cylinder deactivation and start/stop strategy, we reviewed our testing strategy and have the following request.

The 3.0L V6 engine equipped Audi A8 emission data vehicle tested on May 2nd and May 8th at the EPA facility, was tested in two configurations. That is: complete five cycle tests with start/stop active and a complete second set of tests with start/stop system inactive at our facility in Ingolstadt . EPA confirmed the city tests in both configurations, start/stop active and inactive. Under the start/stop enable conditions you saw during the presentation, it is clear that the engine does not stop during three of the 5-cycle tests. There is no engine shut down in Highway, SC03 and Cold CO test cycles and only marginal engine stop in the US06 test cycle. The current start/stop strategy would yield on minor fuel economy improvement in the FTP and US06 cycle and therefore we would prefer to test only the FTP and US06 harmonically average the two sets of test configurations together at the 50/50 rate.

The high cost testing burden at our facility would be lessened and testing capacity could improve. Until which time there are some operational start/stop system strategy changes, we would propose to test only the FTP and US06 with start/stop active and inactive and average these tests at the 50/50 rate.

If you have any questions, please contact me directly.

Best regards,  
Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)<<mailto:Richard.Thomas@VW.com>>

*(See attached file: winmail.dat)*

Manufacturer Name:	Volkswagen	Manufacturer Code:	VWX
Model Year:	2013	Compliance Category:	Light Trucks

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 10/8/2014 1:25:45 PM  
**Subject:** 2015 Volkswagen e-Golf Label  
e-Golf label.xlsm

Hi Dave;

I have attached the EPA calculator for the e-Golf. The two configuration kW-hr/100 mile values were sales weighted arithmetically averaged together before inserting them into this calculator as you told me previously over the phone. I am still a little uncertain about unrounded values so if you run the audit again this morning I may be able to figure out which values are in error if it discovers some.

It looks like now the testing at EPA for this e-Golf certification car has been waived as of late yesterday evening.

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist  
Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

<mailto:Richard.Thomas@VW.com>

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**Cc:** Giles, Michael (EEO)[michael.giles@vw.com]; Good, David[good.david@epa.gov]  
**From:** Peavyhouse, Robert  
**Sent:** Mon 3/3/2014 8:19:43 PM  
**Subject:** RE: Help requested with GHG Discrepancy

As of now it is way down on the list. It is a "would be nice" feature.

All of the things that are broken or missing have a higher priority.

We are still working on basic things like calculating all electric model types, hydrogen fuel cells, etc.

Once we get all that stuff working and a budget, then hopefully we can get it fixed.

Fortunately it is a quick, cheap fix, so maybe we can get it in sooner rather than later.

Robert Peavyhouse  
Compliance Division  
U.S. EPA - OTAQ  
Phone: (734) 214-4814

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Monday, March 03, 2014 2:11 PM  
**To:** Peavyhouse, Robert  
**Cc:** Giles, Michael (EEO); Good, David  
**Subject:** RE: Help requested with GHG Discrepancy

Thank you Bob.

When will the changes to your report have results displayed to four places? We wouldn't have to bother with this next year.

Best regards,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**From:** Peavyhouse, Robert [<mailto:Peavyhouse.Robert@epa.gov>]  
**Sent:** Monday, March 03, 2014 1:48 PM  
**To:** Giles, Michael (EEO)  
**Cc:** Thomas, Richard (EEO)  
**Subject:** RE: Help requested with GHG Discrepancy

The value comes from:

Gasoline GHG = 302.0

E85 GHG = 299.4

The model type value with AMFA equivalent credits becomes the average of the 2

$$\text{Final} = ((302.0) + (0.15 * 299.4)) / 2 = 173.455$$

This value rounds down to 173 for averaging into the fleet calculation.

This is exactly why I was telling you that I want our report changed so that it displays 4 decimal

places.

Just displaying 173.5 kind of misleads mfrs to round this value up to 174.

Robert Peavyhouse  
Compliance Division  
U.S. EPA - OTAQ  
Phone: (734) 214-4814

**From:** Giles, Michael (EEO) [<mailto:michael.giles@vw.com>]  
**Sent:** Monday, March 03, 2014 1:06 PM  
**To:** Peavyhouse, Robert  
**Cc:** Thomas, Richard (EEO)  
**Subject:** RE: Help requested with GHG Discrepancy

Thanks Bob,

Could you check the LDT tab for index # ADX105. It shows GHG 1-place value of 173.5 which is somehow rounded to 173. Of course we think in any case it should be rounded to 174.

Please advise or call me if you can.

Thanks,

Mike

Michael Giles

Certification Engineer – EEO

VW Group of America

(248) 754-4229

**From:** Peavyhouse, Robert [<mailto:Peavyhouse.Robert@epa.gov>]  
**Sent:** Monday, March 03, 2014 10:59 AM  
**To:** Giles, Michael (EEO)  
**Cc:** Thomas, Richard (EEO)  
**Subject:** RE: Help requested with GHG Discrepancy

Here is my duplication of the Verify values.

The next step is to verify individual model type values for mismatch.

If you identify them, I can run the calcs for individual model types as you request them.

Robert Peavyhouse  
Compliance Division  
U.S. EPA - OTAQ  
Phone: (734) 214-4814

**From:** Giles, Michael (EEO) [<mailto:michael.giles@vw.com>]  
**Sent:** Tuesday, February 25, 2014 3:30 PM  
**To:** Peavyhouse, Robert  
**Cc:** Thomas, Richard (EEO)  
**Subject:** RE: Help requested with GHG Discrepancy

Hello Bob,

First some good news - Please ignore my request below regarding the issue with our MT index

#91. We have corrected this by changing the DF rounding to whole numbers prior to adding. Once I found your email from last year that helped. NOTE – this is contrary to Dave Goods instructions to round to 1 place (!)

But, I do have another question . Our LDT “ final” calculation is off by a couple tenths, and it is not clear why. I am attaching a simple worksheet to show my calculations as well as the latest draft Verify report.

We hit the PC number right on for both baseline and final but not sure why there is a difference with this LDT fleet.

Any advice you can give here would be appreciated.

Thanks,

Mike

**From:** Giles, Michael (EEO)  
**Sent:** Monday, February 24, 2014 10:42 AM  
**To:** Peavyhouse, Robert ([Peavyhouse.Robert@epa.gov](mailto:Peavyhouse.Robert@epa.gov))  
**Cc:** Thomas, Richard (EEO) ([Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com))

**Subject:** Help requested with GHG Discrepancy

Hello Bob,

We are working on our final CAFÉ / GHG report, and are in the process of resolving some differences.

We kindly request your help with one issue, where we find a difference between the certification CSI and the CAFÉ/GHG report values.

There is a single configuration for this model type:

MFR Code	VWX
Model Type Index:	# 91
City Test # 360	DADX10021373 CREE: 359 DF: 0.5 rounded CREE: 360
Highway Test # 230	DADX10021373 CREE: 230 DF: 0.5 rounded CREE: 230

The FTP value of  $359 + 0.5 = 360$  is found in the CSI and matches our internal data.

However, the CAFE/GHG report from VERIFY shows a value of 359 for the city test.

Per GHG rounding guidance from Dave good (last year), we do as follows:

- Round the sum of the CREE/OCREE constituents (from step 2) to nearest whole number.
- Apply city Super DF to the city CREE/OCREE test result and the hwy Super DF to the hwy CREE/OCREE test result. \*\*\* **Rounded to 1 place** \*\*\*
- After applying Super DFs, round the resultant CREE/OCREE test results to nearest whole number

We believe the 360 as calculated here and in the CSI (and consistent with the rounding rules)should be the correct value.

Please advise, or call if you would like to discuss.

Regards,

Mike

Michael Giles

Certification Engineer – EEO

VW Group of America

(248) 754-4229

**To:** Good, David[good.david@epa.gov]  
**From:** Schmidt, Oliver (EEO)  
**Sent:** Thur 1/9/2014 4:14:31 PM  
**Subject:** RE: 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter (30.7mpg) disagrees with Verify (33.674)

Hello Dave,

our Error was just a Typo, but this is what happens if you transfer data from a computer system to a sheet of paper.

This is why I asked about the redundancy. But I understand your fear of false date in Verify.

Oliver

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Donnerstag, 9. Januar 2014 10:36  
**To:** Schmidt, Oliver (EEO); Thomas, Richard (EEO)  
**Cc:** French, Roberts; Snyder, Jim; Kata, Leonard (EEO)  
**Subject:** RE: 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter (30.7mpg) disagrees with Verify (33.674)

Oliver,

Here's my short answer (not a legal answer from an EPA attorney):

The written CAFE/GHG model year report is required by EPA regulations. It contains information and statements which are not in EPA's Verify database (and can't be easily added to EPA's database). The data in Verify (including the manufacturer's official GHG & CAFE values, GHG & CAFE standards, etc) can be easily changed by a non supervisory company employee at any time---whereas a letter signed by a manager is not easily changed and provides the manufacturer's "official" CAFE/GHG values to EPA.

I have seen many cases where the data in Verify does not agree with the manufacturer's model year report values (in their official CAFE/GHG letter). [That review is part of my job, e.g. when I approve a CAFE/GHG calculation for EPA management's signature.]

Hope this helps.

Sorry to be so picky and request that VW revise their 2012 CAFE standard in your model year report---but I couldn't be absolutely sure whether your letter was correct or whether the value in Verify was correct.

Thanks again for making the revision to your letter.

Dave

**From:** Schmidt, Oliver (EEO) [<mailto:Oliver.Schmidt@vw.com>]  
**Sent:** Wednesday, January 08, 2014 1:43 PM  
**To:** Good, David; Thomas, Richard (EEO)  
**Cc:** French, Roberts; Snyder, Jim; Kata, Leonard (EEO)  
**Subject:** RE: 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter (30.7mpg) disagrees with Verify (33.674)

Hello,

i hope you all had a good start to the new year.

May I ask one simple question ? Why do we need to submit a written report if the data is already available in Verify ?

Wouldn't it make everybodys life much easier if there would be only one report ?

Oliver

**Oliver Schmidt**

General Manager

Engineering and Environmental Office

**VOLKSWAGEN Group of America, Inc.**

3800 Hamlin Road  
Auburn Hills, MI 48326  
Phone: (248) 754-4201  
Cell: (248) 760-6180  
FAX: (248) 754-4207  
E-Mail: [Oliver.Schmidt@vw.com](mailto:Oliver.Schmidt@vw.com)

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Donnerstag, 2. Januar 2014 15:38  
**To:** Thomas, Richard (EEO)  
**Cc:** French, Roberts; Schmidt, Oliver (EEO); Snyder, Jim; Kata, Leonard (EEO)  
**Subject:** RE: 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter (30.7mpg) disagrees with Verify (33.674)

Richard,

Happy New Year, etc.

When you get a chance, please email me a copy of the revision/addendum to the attached VW CAFE letter (and enter it into the Verify document module).

Thanks

**From:** Thomas, Richard (EEO) [<mailto:Richard.Thomas@vw.com>]  
**Sent:** Thursday, December 26, 2013 9:05 AM  
**To:** Good, David  
**Cc:** French, Roberts; Schmidt, Oliver (EEO); Snyder, Jim; Kata, Leonard (EEO)  
**Subject:** RE: 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter (30.7mpg) disagrees with Verify (33.674)

Hi Dave;

I checked the files and found that our letter you attached contained a typo, the correct Import Passenger Car CAFE reformed standard should be 33.7 MPG as you see from the Verify processing report, and not the 30.7 MPG. I will revise the letter, if you prefer, when I am back in the office on January 7<sup>th</sup>.

Happy New Year!

Richard

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Monday, December 23, 2013 2:34 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** French, Roberts; Schmidt, Oliver (EEO); Snyder, Jim  
**Subject:** 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter (30.7mpg) disagrees with Verify (33.674)

Richard,

While reviewing VW's 2012 Passenger Car CAFE letter & the data in Verify, I noticed a discrepancy in the VW letter (attached) and the Verify Report (attached) for the Import

passenger car CAFE standard. Page 1 of VW letter indicates an Import Pass Car standard of 30.7 mpg while the Verify report indicates a manufacturer input CAFE standard of 33.674.

Your CAFE letter didn't supply the footprint standards calculations, so I can't double check the standard listed on page 1 of the letter.

Based on the footprint data which you entered into Verify, Verify calculated a CAFE standard of 33.7 mpg.

Please advise.

Thanks

**To:** [REDACTED] Ex. 7; [REDACTED]@vw.com]  
**Cc:** [REDACTED] Ex. 7 [REDACTED]@vw.com]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Thur 12/4/2014 2:53:11 PM  
**Subject:** eGolf CAFE calculations attached - See equation in DOE rulemaking  
DOE PEF final rule -65 FR 36986-Jun-12-2000.pdf

[REDACTED] **Ex. 7**

For EVs with no petroleum fired accessories, the CAFE petroleum equivalency factor is 82,049 watt-hours per gallon per 10 CFR 474.- to 474.5.



# Federal Register Registration

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Monday,  
June 12, 2000

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## Part V

# Department of Energy

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Office of Energy Efficiency and  
Renewable Energy

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**10 CFR Part 474**  
**Electric and Hybrid Vehicle Research,**  
**Development, and Demonstration**  
**Program; Petroleum-Equivalent Fuel**  
**Economy Calculation; Final Rule**

**DEPARTMENT OF ENERGY**

**Office of Energy Efficiency and Renewable Energy**

**10 CFR Part 474**

[Docket No. EE-RM-99-PEF]

**RIN 1904-AA40**

**Electric and Hybrid Vehicle Research, Development, and Demonstration Program; Petroleum-Equivalent Fuel Economy Calculation**

**AGENCY:** Department of Energy.

**ACTION:** Final rule.

**SUMMARY:** The Department of Energy (DOE) is revising its regulations on electric vehicles to provide a petroleum-equivalency factor (PEF) and procedures for calculating the petroleum-equivalent fuel economy of electric vehicles. The petroleum-equivalent fuel economy values of an automobile manufacturer's electric vehicles may be included in the calculation of that manufacturer's corporate average fuel economy (CAFE), according to regulations prescribed by the Environmental Protection Agency and the Department of Transportation.

**EFFECTIVE DATE:** This final rule is effective July 12, 2000.

**ADDRESSES:** Written comments received in response to the notice of proposed rulemaking, a transcript of oral comments presented at the public hearing on August 17, 1999, and supporting technical information described in the notice of proposed rulemaking are filed at the DOE Freedom of Information Reading Room under docket number EE RM 99 PEF. You may read and copy any of this docket material at: DOE Freedom of Information Reading Room, Room 1E 190, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585, (202) 586 3142. Hours: 9 a.m. 4 p.m., Monday through Friday except Federal holidays.

Additional background materials are also available at the DOE Freedom of Information Reading Room. Copies of the hearing transcript and written comments received regarding the withdrawn February 4, 1994, proposed rule are filed under Docket No. EE RM 94 101. Earlier materials related to the calculation of the PEF are contained in Docket No. EE RM 93 301.

**FOR FURTHER INFORMATION CONTACT:**

*Technical Information:* Mr. Rogelio Sullivan, U.S. Department of Energy, Office of Transportation Technologies, EE 32, Rm 5G 046, 1000 Independence Avenue SW,

Washington, DC 20585, (202) 586 8042.

*Legal Information:* Mr. Eugene Margolis, U.S. Department of Energy, Office of General Counsel, GC 72, Rm 6B 256, 1000 Independence Avenue SW, Washington, DC 20585, (202) 586 9526.

**SUPPLEMENTARY INFORMATION:****I. Background****II. Discussion**

- A. Requirements of the Motor Vehicle Information and Cost Savings Act, as amended
- B. PEF Development Process
- C. PEF Calculation Procedures
- 1. General Form of the PEF Equation
- 2. Gasoline-Equivalent Energy Content of Electricity Factor
- 3. "Fuel Content" Factor
- 4. Petroleum-Powered Accessory Factor
- 5. Driving Pattern Factor
- 6. Use of the PEF
- 7. Sample Calculations

**III. Public Comments Received on the Notice of Proposed Rulemaking and DOE's Responses****IV. Procedural Requirements****I. Background**

In 1975, Congress mandated fuel economy standards for automobiles produced in or imported into the United States in an effort to conserve energy through improvements in the efficiency of motor vehicles. The new law required that every manufacturer or importer of automobiles in the United States meet a corporate average fuel economy standard for the fleet of vehicles produced or imported in any model year. Although certain classes of electric vehicles qualify as "automobiles" under the law, they do not consume "fuel" as defined in the law. Therefore, inclusion of electric vehicles in a manufacturer's corporate average fuel economy is impossible without a method for expressing the electrical energy consumption rate as an equivalent consumption rate of gasoline. Congress directed the Secretary of Energy to establish a method for determining the petroleum-equivalent fuel economy of electric vehicles.

Congress anticipated that allowing manufacturers to include the expected high equivalent "fuel economy" of electric vehicles in corporate average fuel economy calculations would provide an incentive for vehicle manufacturers to produce and sell electric vehicles. Congress anticipated that the existence of such an incentive would help to accelerate the commercialization of electric vehicles.

DOE published a notice of proposed rulemaking (NOPR) on July 14, 1999 (64 FR 37905), describing a revised petroleum-equivalency factor (PEF) and

supporting rationale. DOE solicited public comments on the proposed rule and received comments from five organizations representing a cross section of stakeholders. DOE considered these comments carefully before preparing today's final rule. A summary of the comments and DOE's responses are provided in section III of this document. DOE believes that the final rule presented today is responsive to Congressional intent, addresses stakeholder comments and concerns with the proposed rule, is consistent with the regulatory treatment of other types of alternative fuel vehicles, and is straightforward to understand and implement.

Administrative responsibilities for the corporate average fuel economy program are assigned to the Department of Transportation and the Environmental Protection Agency under the Motor Vehicle Information and Cost Savings Act (49 U.S.C., Subtitle VI, Part C). The Secretary of Transportation is responsible for prescribing the corporate average fuel economy standard and enforcing the penalties for failure to meet these standards. The Administrator of the Environmental Protection Agency is responsible for establishing test procedures, for testing the efficiency of vehicles subject to corporate average fuel economy standards, and for calculating a manufacturer's corporate average fuel economy value. DOE is responsible for developing and promulgating the petroleum-equivalency factor, the key component in the calculation of petroleum-equivalent fuel economy values for electric vehicles.

**II. Discussion**

*A. Requirements of the Motor Vehicle Information and Cost Savings Act, as Amended*

Section 503(a)(3) of the Motor Vehicle Information and Cost Savings Act (49 U.S.C. 32904(a)(2)) requires DOE to determine the petroleum-equivalent fuel economy values for electric vehicles, taking into account the following parameters:

- (i) The approximate electric energy efficiency of the vehicles considering the vehicle type, mission, and weight;
- (ii) The national average electricity generation and transmission efficiencies;
- (iii) The need of the Nation to conserve all forms of energy, and the relative scarcity and value to the Nation of all fuel used to generate electricity; and

(iv) The specific driving patterns of electric vehicles as compared with those of petroleum-fueled vehicles.

Section 503(a)(3) also provides for revision of such values if necessary.

#### B. PEF Development Process

The development process of the PEF and the rationale were presented in detail in the notice of proposed rulemaking, and are not repeated in full here. Section C provides a brief description of each of the terms in the PEF equation. Section III also provides an abbreviated discussion of several of the key issues underlying DOE's rationale.

#### C. PEF Calculation Procedures

The PEF is based on the existing regulatory approach at 49 U.S.C. 32905 for determining the petroleum-equivalent fuel economy of alternative fueled vehicles. The calculation procedure converts the measured electrical energy consumption of an electric vehicle into a raw gasoline-equivalent fuel economy value, and then divides this value by 0.15 to arrive at a final petroleum-equivalent fuel economy value which may then be included in the calculation of the manufacturer's corporate average fuel economy. Two additional factors are present in the equation, but these will usually have a value of unity and thus will not influence the value of the PEF. The terms comprising the PEF and the procedure for applying the PEF are described in greater detail below.

##### 1. General Form of the PEF Equation

The general form of the PEF equation is:

$$\text{PEF} = E_g * 1/0.15 * \text{AF} * \text{DPF}$$

where:

$E_g$  = Gasoline-equivalent energy content of electricity factor

$1/0.15$  = "Fuel content" factor

AF = Petroleum-fueled accessory factor

DPF = Driving pattern factor

The development of these factors is described below.

##### 2. Gasoline-Equivalent Energy Content of Electricity Factor

When comparing gasoline vehicles with electric vehicles, it is essential to consider the efficiency of the respective "upstream" processes in the two fuel cycles. A full description of the differences in the processes is beyond the scope of this rulemaking, but the critical difference is that a gasoline vehicle burns its fuel on-board the vehicle, and an electric vehicle burns its fuel (the majority of electricity in the U.S. is generated at fossil fuel burning

powerplants) off-board the vehicle. In both cases, the burning of fuels to produce work is the least efficient step of the respective energy cycles.

Therefore, the PEF includes a term for expressing the relative energy efficiency of the full energy cycles of gasoline and electricity. This term, the gasoline-equivalent energy content of electricity factor, abbreviated as  $E_g$ , is defined as:

$$E_g = \text{gasoline-equivalent energy content of electricity} = (T_g * T_t * C) T_p$$

where:

$T_g$  = U.S. average fossil-fuel electricity generation efficiency = 0.328

$T_t$  = U.S. average electricity transmission efficiency = 0.924

$T_p$  = Petroleum refining and distribution efficiency = 0.830

$C$  = Watt-hours of energy per gallon of gasoline conversion factor = 33,705 Wh/gal

$$E_g = (0.328 * 0.924 * 33705)/0.830 = 12,307 \text{ Wh/gal}$$

The derivation of these values is straightforward but lengthy and is therefore not discussed in this notice. Details on the assumptions, calculations, and data sources used to derive these values are described in materials contained in Docket No. EE RM 99 PEF, which may be reviewed at the DOE Freedom of Information Reading Room, at the address and times stated above.

##### 3. "Fuel Content" Factor

The fuel content factor has a value of 1/0.15 and is included in the PEF for the reasons described in the notice of proposed rulemaking and the responses to comments section of this notice. Briefly, these reasons are:

(i) Consistency with existing regulatory and statutory procedures;

(ii) Provision of similar treatment to manufacturers of all types of alternative fuel vehicles; and

(iii) Simplicity and ease of use.

The fuel content factor value of 1/0.15 is equivalent to a multiple of 6.67.

##### 4. Petroleum-Powered Accessory Factor

A minority of electric vehicles, primarily those that may be operated in colder climates, may be equipped with auxiliary petroleum-powered accessories, such as cabin heater/defroster systems. DOE addresses the possible use of such petroleum-powered accessories in the PEF calculations by incorporating an Accessory Factor (AF). This factor reduces the PEF by ten percent when an electric vehicle is equipped with any petroleum-powered accessories. This results in two possible accessory factor values:

Petroleum-powered accessories installed?	Accessory factor (AF) value
No .....	1.00
Yes .....	0.90

DOE recognizes that there are many variables affecting the actual energy efficiency penalty of petroleum-powered accessories, but believes that the ten percent penalty is a reasonable representative value. DOE has prepared a supporting technical analysis of the magnitude of the actual energy efficiency penalty of petroleum-powered accessories, and placed this analysis in the docket. Because this approach penalizes electric vehicles equipped with petroleum-powered accessories, it provides an incentive for manufacturers to develop vehicles with electrically-powered accessories.

##### 5. Driving Pattern Factor

Congress required that DOE consider the potential that electric vehicles may be used differently than gasoline vehicles, primarily due to its shorter range and longer "refueling" times. However, to meet the definition of an "automobile" at 40 CFR part 600 and be eligible for inclusion in the calculation of a manufacturer's corporate average fuel economy, a vehicle must be "manufactured primarily for use on public streets, roads, or highways." Thus, DOE believes that electric vehicles eligible for inclusion in CAFE will offer capabilities (perhaps excepting driving range) similar to those of conventional vehicles. For these reasons, DOE is setting the value of the Driving Pattern Factor (DPF) at unity (1.00).

##### 6. Use of the PEF

The value of the PEF is equal to the product of the values of the gasoline-equivalent energy content of electricity ( $E_g$ ), the fuel content factor of 1/0.15, the petroleum-fueled accessory factor (AF), and the driving pattern factor (DPF):

$$\text{PEF} = E_g * 1/0.15 * \text{AF} * \text{DPF}$$

substituting values,

$$\text{PEF} = (12,307 \text{ Wh/gal}) * (1/0.15) * (1.00 \text{ or } 0.90) * (1.00)$$

or,

$\text{PEF} = 82,049 \text{ Wh/gal}$  (if no petroleum-powered accessories are installed)

$\text{PEF} = 73,844 \text{ Wh/gal}$  (if any petroleum-powered accessories are installed)

Dividing the PEF by the combined (city and highway) energy consumption of an electric vehicle yields the petroleum-equivalent fuel economy of that electric vehicle in miles per gallon:

$$\text{mpg} = \text{PEF (Wh/gal)} / \text{combined [electrical] energy consumption (Wh/mile)}$$

## 7. Sample Calculations

Sample calculations of the petroleum-equivalent fuel economy of hypothetical electric vehicles are presented in the Appendix of the rule.

## III. Public Comments Received on the Notice of Proposed Rulemaking and DOE's Responses

The Department encouraged public participation in this rulemaking. DOE, in the NOPR, urged individual vehicle manufacturers, fuel producers and providers, trade associations, vehicle owners and operators, States or other governmental entities, and other affected or interested parties to submit written comments on the proposal and/or to testify at a hearing held on August 17, 1999, in Washington, DC.

You may review the written comments and the hearing transcript, as well as other docket material in the DOE Freedom of Information Reading Room at the address shown at the beginning of this rulemaking. The materials are filed under docket number EE RM 99 PEF.

DOE received written comments on the proposed rule from five organizations:

1. Alliance of Automobile Manufacturers (AAM—representing BMW, DaimlerChrysler, Fiat, Ford, General Motors, Isuzu, Mazda, Nissan, Toyota, Volkswagen, and Volvo);
2. California Air Resources Board (CARB);
3. Electric Vehicle Association of the Americas (EVAA);
4. Georgia Power; and
5. Virginia Power

EVAA also testified at the public hearing. The common thread through most of the comments was the strong desire to have the final rule in place as soon as possible. Commentors also suggested that DOE only consider changes to the proposed rule if such changes would not delay issuance of the final rule.

Following are summaries of the comments received and DOE's responses. In most cases, similar comments have been grouped together and given a single response. Additional supporting analyses may be found in the docket.

*Comment 1:* EVAA, Georgia Power, and Virginia Power generally support DOE's revised approach. The PEF value of 81,407 Wh/gal [in the proposed rule] is acceptable, with the modifications described in the provided comments. EVAA specifically believes that the proposed PEF aligns EVs with other alternative fuel vehicles for fuel economy purposes. (EVAA, Georgia Power, Virginia Power)

*Response:* DOE acknowledges the general support for the revised approach and consistent treatment of Alternative Fuel Vehicles. DOE values the opinions of these informed stakeholders. The suggested modifications are discussed below.

*Comment 2:* Publishing a final rule should be the top priority—don't delay publication of the final rule.

The Alliance supports the proposal as is and urges that it be finalized at the earliest possible time. (AAM)

DOE should make the simple corrections suggested before publication of the final rule. (EVAA, Georgia Power, Virginia Power)

DOE should attempt to address the larger issues (such as explicitly quantifying the relative scarcity of fuels), but only if it will not delay the publication of a final rule. (EVAA, Georgia Power, Virginia Power)

*Response:* DOE agrees that under present conditions, timely publication of a final rule is a higher priority than technical hair splitting. DOE will still make several adjustments to the final rule, as described below.

*Comment 3:* Publish the final rule rapidly; fine-tune it later. DOE should establish a schedule in the final rule for addressing items that could not be quickly resolved at this time. (Georgia Power, Virginia Power)

*Response:* The NOPR explicitly states (§ 474.5) that DOE will perform a review five years after publication of the final rule to determine whether any updates and/or revisions are necessary. DOE anticipates that better data on many aspects of EV use will be available by that time.

*Comment 4:* Incorporate a scarcity factor in the equation as required by law. DOE's own analysis shows scarcity and energy security advantages for electricity and that fuels used to produce electricity are abundant, and that reserves of nuclear and renewables are essentially unlimited. By not including a scarcity factor, DOE is not being responsive to this requirement of the Act and is failing to credit electricity for use of these abundant resources. (EVAA, Georgia Power, Virginia Power)

*Response:* The final rule is based on the relevant factors in Section 503 (a)(3) of the Motor Vehicle Information and Cost Saving Act, including the relevant scarcity of fuel used to generate electricity. As described in the NOPR, DOE performed a careful and thorough analysis of the present and projected availability of energy resources. This analysis showed that fuels (raw resources) used to produce electricity are abundant, as are the raw resources used to produce gasoline and diesel fuel

(in fact, "proved reserves" of all of these energy resources tend to increase over time as new resources are discovered and better recovery techniques are developed). Since all of these fuels are abundant, the concept of "relative scarcity" is difficult to quantify objectively, and in DOE's judgement, should not be an appropriate guiding factor in the rulemaking at this time.

The commentors' claim that electricity is the only vehicle fuel that can be produced from nuclear or renewable sources is incorrect. For example, both hydrogen and ethanol can be produced totally from nuclear and/or renewable sources.

The 1/0.15 factor used in the equation is not intended to be a scarcity factor *per se*, but it does result in a very substantial adjustment to the raw calculated energy efficiency of electric vehicles. It is included to reward electric vehicles' benefits to the Nation relative to petroleum-fueled vehicles, in a manner consistent with the regulatory treatment of other types of alternative fueled vehicles and the authorizing legislation.

*Comment 5:* Georgia Power and Virginia Power support the use of the 1/0.15 factor in simplifying the calculation, but DOE should provide a technical basis for its application to EVs, or else modify the factor accordingly. (Georgia Power, Virginia Power)

*Response:* DOE agrees that the replacement of the previously proposed "scarcity factor" with the 1/0.15 factor does make the calculation considerably simpler, but this was not the only reason DOE replaced the scarcity factor with the 1/0.15 factor approach.

In the NOPR, DOE describes its assessment of the technical basis for the application of a factor of 1/0.15 to the measured fuel economy of liquid-alternative fueled vehicles (e.g., M85 fueled vehicles) under existing law (64 F.R. 37907). The NOPR also observes that the law applies the same 1/0.15 factor to gaseous-alternative fueled vehicles, even though there is not an obvious technical basis for doing so.

DOE determined that the most equitable and viable approach would be to apply the same 1/0.15 factor to electric vehicles in order to maintain consistency with the existing regulatory treatment of other types of alternative fueled vehicles.

All alternative fuels offer the intrinsic benefit of being substitutes for petroleum, on which nearly 100 percent of the Nation's transportation depends. In other words, any alternative fuel helps the Nation avoid having all of its transportation "eggs" in the petroleum

"basket." Each mile driven in an alternative fuel vehicle offsets approximately one mile driven in a petroleum-fueled vehicle.

*Comment 6:* Assigning one fuel content factor (1/0.15) to all alternative fuel vehicles is inappropriate since "the fuel efficiency benefits of electric vehicles far exceed those of other alternative fuel vehicles." DOE should use a fuel content factor that more accurately represents electric vehicle benefits in comparison to other alternative fuels. (CARB)

*Response:* The efficiency of EVs varies widely as a function of motor and drivetrain efficiency, driving cycle, and the round-trip efficiency of the battery. The energy source which offers the greatest benefits depends on many factors, and the energy source that offers the greatest benefit to one set of users may not be the most beneficial for a different set of users or the general public. These benefits may vary by geography, fuel and generating method.

As noted in the NOPR, DOE invested considerable time and effort in attempting to develop a method that could rigorously account for the advantages to the Nation offered by electric vehicles compared to conventional vehicles, but was unable to identify a method that was sufficiently objective, robust, and consistent with established policy directions.

Thus, DOE stands by its proposal to provide electric vehicles the same reported-fuel-efficiency incentive (the 1/0.15 factor) that other alternative fuel vehicles currently enjoy.

Although electric vehicles and other alternative fuel vehicles will have its energy-equivalent fuel economy adjusted by the same incentive factor, electric vehicles will still enjoy favorable regulatory treatment under DOE's proposal. This is because EVs are specifically exempt from caps on the amount that alternative fuel vehicles are allowed to contribute to raising a manufacturer's overall CAFE (49 U.S.C. 32906(a)).

*Comment 7:* The U.S. Average Electricity Generation factor ( $T_g = 0.328$ ) is based only on fossil fuel generation, and does not account for the efficiencies of nuclear or renewable energy generation. Counting the efficiency of these sources relative to fossil fuel generation as 100 percent, the  $E_g$  factor should be equal to about 0.53. (EVAA says 0.40 to 0.53 depending on treatment of the nuclear component). (EVAA, Georgia Power, Virginia Power)

*Response:* DOE reminds the commentors that the  $E_g$  factor represents relative efficiency, *not* resource

abundance. There are two reasons why DOE chose to use conversion efficiencies for electricity that reflect the typical efficiencies of fossil fuel-fired powerplants. First, existing nuclear and hydroelectric plants are now operated at essentially full capacity. Since no significant additions to U.S. nuclear or hydro-electric capacity are planned, any increase in electricity demand that results from expanded production and use of electric vehicles is very likely to be met by fossil fuel-fired powerplants. Second, although the fuel supply for nuclear, hydro, and renewable generated electricity is plentiful, the process for converting the raw fuel or physical energy to electricity is, in most cases, less efficient than fossil fuel plants. Further, no energy conversion process is 100 percent efficient.

Since several comments were provided on this issue, DOE took a closer look at the relative efficiency of nuclear vs. fossil fuel generation. Nuclear power plants generate steam at lower temperatures than fossil power plants, reducing their relative thermodynamic efficiency. Typically, nuclear plants generate steam at a maximum cycle temperature of about 575 Kelvin (~575 °F), while fossil plants generate steam at temperatures of about 825 Kelvin (~1025 °F). Thus, assuming both cycles reject heat to the surroundings at 294 Kelvin (70 °F), their respective theoretical limiting Carnot efficiencies ( $1 - (T_L/T_H)$ ) is 49 percent for nuclear and 64 percent fossil. The  $E_g$  factor uses the actual average fossil fuel-to-electricity conversion efficiency, which is 32.8 percent. Scaling the nuclear Carnot efficiency by the same ratio suggests that nuclear plants achieve conversion efficiencies on the order of 25 percent. While this is a very crude analysis, it is likely that a more rigorous analysis would yield qualitatively similar results.

Therefore, including the nuclear component in the calculation of the  $E_g$  factor would likely cause the factor to change *downward*, not upward as suggested by the commentors.

Data on the "efficiency" of hydroelectric generation are somewhat difficult to obtain, though hydroelectric generation efficiency may be higher than typical fossil fuel-fired powerplants. This is because hydroelectric power generation is based on principles of momentum and/or pressure transfer and not combustion and heat transfer. Without suitable data, and without taking a significant amount of additional time for detailed analysis, DOE notes that the relatively small amount of relatively high-efficiency hydroelectric generation tends to offset

the larger amount of relatively less-efficient nuclear power generation. Thus, the two trends tend to cancel each other and the efficiency of fossil generation would continue to dominate.

Therefore, DOE has continued to use the value of  $E_g = 0.328$  in light of: (1) the commentors' clear desire to place a higher priority on timely publication of a final rule, than on performing additional technical analyses; and (2) since the fossil generation component will dominate the marginal electrical generation efficiency for many years.

*Comment 8:* The U.S. Average Electricity Transmission and Distribution Efficiency factor  $T_t$  places a unique and unfair additional penalty on electric vehicles since fuel distribution efficiency is not included in the mileage calculations for any other vehicle energy source. DOE should assign a value of unity to the  $T_t$  factor. (Georgia Power, Virginia Power)

*Response:* As the commentors note, the  $T_t$  factor is required by the authorizing legislation. DOE is aware of the potential for such a factor to unfairly penalize EVs; this is the reason why DOE added the U.S. Petroleum Refining and Distribution factor  $T_p$  (= 0.830) in the denominator of the  $E_g$  factor equation to offset the  $T_t$  (= 0.924) factor in the numerator.

Note that  $T_p$  includes refining as well as distribution in order to include most of the corresponding steps in the energy chain—just as the equation attempts to do with the electric energy chain. Note that raw resource extraction (mining, drilling, etc.) is not counted. Data that can be used to measure the "efficiency" of these processes is difficult to obtain, and varies widely depending on the characteristics of the individual site. DOE believes that the relative difference in "efficiency" of resource extraction (i.e., energy expended in recovery relative to the energy content of the resource recovered) between *individual* sites of one type (e.g., coal mines) is probably greater than the difference in the *average* efficiency of different extraction processes (e.g., mining vs. pumping).

Together, the ratio of the factor's  $T_t / T_p$  (= 1.113) increases the assigned petroleum-equivalent fuel economy of EVs. Therefore, the  $T_t$  factor is not an "unfair penalty" on EVs, but is in fact a benefit for EVs.

*Comment 9:* The energy content of a gasoline factor,  $C = 33,440 \text{ Wh/gal}$ , is inconsistent with the "accepted actual value" [physical constant in EVAA's oral comments] used by other DOE programs. DOE should use the value of  $33,705 \text{ Wh/gal}$  ( $115,000 \text{ Btu/gal} + 3.412 \text{ Btu/Wh}$ ) that is reported by the

Alternative Fuels Data Center. (EVAA, Georgia Power, Virginia Power)

*Response:* DOE disagrees that a single "actual" value for the energy content of gasoline exists. Gasoline is a varying blend of hundreds of components, and thus the energy content of individual batches of gasoline varies by several percentage points from grade-to-grade and from brand-to-brand. The energy content also varies regionally, seasonally, and over the long-term in response to changes in available feedstock, regulatory requirements, and economic pressures.

DOE agrees, however, that a consistent "average" value should be used across government programs. Since the PEF is attempting to compare the energy efficiency of electric vehicles to the fuel economy of conventional vehicles as measured by the EPA, the energy content of gasoline value used in the PEF should match the energy content of the gasoline used by EPA in testing the fuel economy of gasoline vehicles.

However, EPA has not provided a value for the energy content of its testing gasolines. Therefore, DOE will use the value of 33,705 Wh/gal, obtained by dividing the 115,000 Btu/gal value reported by the Alternative Fuel Data Center, by the (rounded) conversion factor of 3.412 Btu/Wh.

*Comment 10:* Develop a technical basis for the accessory factors used when the vehicle has petroleum-fueled accessories installed. (CARB, Georgia Power, Virginia Power)

*Response:* On the basis of the comments received and DOE's additional analysis of the impact of petroleum-fueled accessories, DOE has decided to replace the two accessory factors with a single accessory factor that would be applied if an electric vehicle includes any petroleum-powered accessories. The value of this single accessory factor will be 0.9, i.e., a 10 percent penalty.

A technical analysis of the magnitude of this penalty is now included in the docket. DOE notes that many variables affect the actual energy efficiency impact of petroleum-powered accessories on EVs, including accessory sizing (e.g., heater capacity) and the efficiency of both the vehicle and the accessory. To be truly accurate, it would be necessary to measure the actual consumption of the accessories installed in each vehicle and project this consumption over a suitable duty cycle for the vehicle. This process would add significant complexity, would place a substantial burden on automobile manufacturers and the EPA, and would provide few policy benefits not

obtainable with the fixed accessory factor.

DOE expects that very few electric vehicles will be equipped with petroleum-powered accessories, as such accessories contradict many of the motivations and attractions that lead customers to purchase electric vehicles.

*Comment 11:* DOE should encourage the Environmental Protection Agency (EPA) to rely on the test procedures established by CARB for the testing and certification of EVs (these procedures are based on SAE J1634). The CARB procedures are consistent with current industry practice. (AAM, EVAA)

*Response:* As the comments suggest, EPA rather than DOE is responsible for selecting and implementing the EV test procedures. DOE suggests that EVAA and AAM offer their recommendations on test procedures directly to EPA.

*Comment 12:* The 55 percent urban and 45 percent highway weighting factors proposed do not represent the way that electric vehicles are used, particularly, those EVs that are designed for non-highway and/or neighborhood use. (CARB)

*Response:* There are actually two issues raised by this comment. The first is that the weightings do not reflect the usage patterns of at least a portion of EVs. The second issue, which is not stated but is implied, is that DOE should adjust the factors to accommodate limited performance EVs.

DOE agrees that there are some EVs that perform differently and will be used differently from conventional automobiles. DOE also anticipates that a limited number of customers with suitable "mission requirements" will purchase and operate limited performance EVs as replacements for conventional automobiles. However, DOE notes that to be included in CAFE calculations, a vehicle must meet the definition of an automobile at 40 CFR part 600, which states that such a vehicle must be "manufactured primarily for use on public streets, roads, or highways." Limited performance EVs (such as neighborhood electric vehicles) that cannot keep up with highway traffic clearly do not meet this requirement and are categorically ineligible for inclusion in CAFE unless 40 CFR part 600 is appropriately amended.

DOE believes that Congress intended the PEF to be an incentive for manufacturers to produce roadworthy electric vehicles that provide an alternative to conventional petroleum-powered automobiles.

As for the weightings themselves, EPA defines these weightings. DOE used the 55 percent urban and 45 percent

highway weighting factors in the sample calculations because these are the factors used by EPA for conventional vehicles. The paragraph in the NOPR that describes the "city" and "highway" test procedures and the 55/45 percent apportioning of energy consumption values is intended only as an example of how to apply the PEF to determine the petroleum-equivalent fuel economy of an electric vehicle. The 55/45 percent weightings could change if EPA's CAFE calculation procedures are changed in the future.

DOE also notes that the preceding arguments provide a compelling justification for setting the value of the Driving Pattern Factor in the PEF to unity (1.00).

*Comment 13:* Review how changes in EV driving range and infrastructure availability might affect driving patterns of EVs in the future. (CARB)

*Response:* As noted in the preceding response, electric vehicles eligible for inclusion in a manufacturer's CAFE calculation must be competitive with conventional vehicles. This strongly suggests that the Driving Pattern Factor should be equal to unity.

DOE intends to monitor developments related to EVs and their use closely. Consideration of modifications to the Driving Pattern Factor and/or the PEF, in general, will be made at the 5-year review specified in the § 474.5.

#### IV. Procedural Requirements

##### A. Environmental Protection Agency Review

Pursuant to section 7(a) of the Federal Energy Administration Act of 1974 (15 U.S.C. 766(a)), DOE submitted a copy of this rulemaking to the Administrator of the Environmental Protection Agency for the Administrator's concurrence. The Administrator has concurred.

##### B. National Environmental Policy Act Review

This rulemaking has been reviewed in accordance with the requirements of the DOE National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 *et seq.*), and the DOE regulations in 10 CFR part 1021. This rulemaking amends 10 CFR part 474 so that electric vehicles receive similar treatment to what Congress has required for other alternative fuel vehicles under 49 U.S.C. 32905. The Department has determined that this rule is covered by Categorical Exclusion in paragraph A5 to subpart D, 10 CFR part 1021 (rulemaking, interpreting or amending an existing regulation, no change in environmental effect). Accordingly, neither an environmental assessment nor an environmental impact statement is required.

*C. Regulatory Review*

Today's final rule has been determined not to be a "significant regulatory action," as defined in section 3(f) of Executive Order 12866, "Regulatory Planning and Review." 58 FR 51735 (October 4, 1993). Accordingly, this action was not subject to review under the Executive Order by the Office of Information and Regulatory Affairs in the Office of Management and Budget.

*D. Regulatory Flexibility Act*

The Regulatory Flexibility Act (5 U.S.C. 601-612) requires that an agency prepare an initial regulatory flexibility analysis to be published at the time the final rule is published. This requirement (which appears in section 603) does not apply if the agency certifies that the rule will not, if promulgated, have a "significant economic impact on a substantial number of small entities."

DOE certifies that this action will not have a significant economic impact on a substantial number of small entities. It is directed at vehicle manufacturers that will be concerned with a mix of petroleum and electric fueled vehicles in their annual production. None of these manufacturers is a small entity.

*E. Federalism Review*

Executive Order 13132 (64 FR 43255, August 4, 1999) requires that regulations or rules be reviewed for any substantial direct effects on States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among various levels of government. If there are sufficient substantial direct effects, then Executive Order 13132 requires agencies to engage in intergovernmental consultation and take other steps before promulgating such a regulation or rule. This action and 10 CFR part 474 serve only to provide a method of interpreting 40 CFR part 600 (Fuel Economy of Motor Vehicles) for electric vehicles. The action does not involve any substantial direct effects on States or other considerations stated in Executive Order 13132.

*F. "Takings" Assessment Review*

It has been determined that pursuant to Executive Order 12630 (52 FR 8859, March 18, 1988) this final rule would not result in any takings which might require compensation under the Fifth Amendment to the United States Constitution.

*G. Review Under Executive Order 12988*

With respect to the review of existing regulations and the promulgation of

new regulations, section 3(a) of Executive Order 12988, "Civil Justice Reform," 61 FR 4729 (February 7, 1996), imposes on executive agencies the general duty to adhere to the following requirements: (1) eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; and (3) provide a clear legal standard for affected conduct rather than a general standard and promote simplification and burden reduction. With regard to the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that executive agencies make every reasonable effort to ensure that the regulation: (1) clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct, while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting a clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this final rule meets the relevant standards of Executive Order 12988.

*H. Review Under the Unfunded Mandates Reform Act of 1995*

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4) requires each Federal agency to prepare a written assessment of the effects of any Federal mandate in a proposed or final agency rule that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million in any one year. The Act also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and tribal governments on a proposed "significant intergovernmental mandate," and requires an agency plan for giving notice and opportunity to timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. The final rule published today does not contain any Federal mandate, so these requirements do not apply.

*I. Review Under the Treasury and General Government Appropriations Act, 1999*

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105-277) requires Federal agencies to issue a Family Policymaking Assessment for any proposed rule or policy that may affect family well-being. Today's final rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

*J. Congressional Notification*

Consistent with the Small Business Regulatory Enforcement Fairness Act of 1996, DOE will submit to Congress a report regarding the issuance of today's final rule prior to the effective date set forth at the outset of this notice. The report will note the Office of Management and Budget's determination that this rule does not constitute a "major rule" under that Act 5 U.S.C. 801, 804.

*K. Review under the Paperwork Reduction Act*

DOE has determined that this rule does not contain any new or amended record keeping, reporting, or other type of collection of information subject to clearance by the Office of Management and Budget under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*).

**List of Subjects in 10 CFR Part 474**

Corporate average fuel economy, Electric (motor) vehicle, Electric power, Energy conservation, Fuel Economy, Motor vehicles, Research.

Issued in Washington, DC, on May 25, 2000.

**Dan W. Reicher,**  
*Assistant Secretary, Energy Efficiency and Renewable Energy.*

For the reasons set forth in the preamble, DOE revises Part 474 of Chapter II of Title 10 of the Code of Federal Regulations as set forth below:

**PART 474—ELECTRIC AND HYBRID VEHICLE RESEARCH, DEVELOPMENT, AND DEMONSTRATION PROGRAM; PETROLEUM-EQUIVALENT FUEL ECONOMY CALCULATION**

Sec.

- 474.1 Purpose and scope.
  - 474.2 Definitions.
  - 474.3 Petroleum-equivalent fuel economy calculation.
  - 474.4 Test procedures.
  - 474.5 Review and update.
- Appendix to Part 474—Sample Petroleum-Equivalent Fuel Economy Calculations

**Authority:** 49 U.S.C. 32901 *et seq.*

#### § 474.1 Purpose and Scope.

This part contains procedures for calculating a value for the petroleum-equivalent fuel economy of electric vehicles, as required by 49 U.S.C. 32904(a)(2). The petroleum-equivalent fuel economy value is intended to be used by the Environmental Protection Agency in calculating corporate average fuel economy values pursuant to regulations at 40 CFR Part 600—Fuel Economy of Motor Vehicles.

#### § 474.2 Definitions.

For the purposes of this part, the term *Combined energy consumption value* means the weighted average of the Urban Dynamometer Driving Schedule and the Highway Fuel Economy Driving Schedule energy consumption values (weighted 55/45 percent, respectively), as determined by the Environmental Protection Agency in accordance with 40 CFR parts 86 and 600.

*Electric vehicle* means a vehicle that is powered by an electric motor drawing current from rechargeable storage batteries or other portable electrical energy storage devices, provided that:

- (1) Recharge energy must be drawn from a source off the vehicle, such as residential electric service; and
- (2) The vehicle must comply with all provisions of the Zero Emission Vehicle definition found in 40 CFR 88.104 94(g).

*Highway Fuel Economy Driving Schedule energy consumption value* means the average number of watt-hours of electrical energy required for an electric vehicle to travel one mile of the Highway Fuel Economy Driving Schedule, as determined by the Environmental Protection Agency.

*Petroleum equivalency factor* means the value specified in § 474.3(b) of this part, which incorporates the parameters listed in 49 U.S.C. 32904(a)(2)(B) and is used to calculate petroleum-equivalent fuel economy.

*Petroleum-equivalent fuel economy* means the value, expressed in miles per gallon, that is calculated for an electric vehicle in accordance with § 474.3(a) of this part, and reported to the Administrator of the Environmental Protection Agency for use in determining the vehicle manufacturer's corporate average fuel economy.

*Petroleum-powered accessory* means a vehicle accessory (e.g., a cabin heater, defroster, and/or air conditioner) that:

- (1) Uses gasoline or diesel fuel as its primary energy source; and
- (2) Meets the requirements for fuel, operation, and emissions in 40 CFR part 88.104 94(g).

*Urban Dynamometer Driving Schedule energy consumption value* means the average number of Watt-hours of electrical energy required for an electric vehicle to travel one mile of the Urban Dynamometer Driving Schedule, as determined by the Environmental Protection Agency.

#### § 474.3 Petroleum-equivalent fuel economy calculation.

(a) The petroleum-equivalent fuel economy for an electric vehicle is calculated as follows:

(1) Determine the electric vehicle's Urban Dynamometer Driving Schedule energy consumption value and the Highway Fuel Economy Driving Schedule energy consumption value in units of Watt-hours per mile;

(2) Determine the combined energy consumption value by averaging the Urban Dynamometer Driving Schedule energy consumption value and the Highway Fuel Economy Driving Schedule energy consumption value using a weighting of 55 percent urban/45 percent highway; and

(3) Calculate the petroleum-equivalent fuel economy by dividing the appropriate petroleum-equivelency factor (depending on whether any petroleum-powered accessories are installed; see paragraph (b) of this section) by the combined energy consumption value, and round to the nearest 0.01 miles per gallon.

(b) The petroleum-equivelency factors for electric vehicles are as follows:

(1) If the electric vehicle does not have any petroleum-powered accessories installed, the value of the petroleum equivelency factor is 82,049 Watt-hours per gallon.

(2) If the electric vehicle has any petroleum-powered accessories installed, the value of the petroleum-equivelency factor is 73,844 Watt-hours per gallon.

#### § 474.4 Test procedures.

(a) The electric vehicle energy consumption values used in the calculation of petroleum-equivalent fuel economy under § 474.3 of this part will be determined by the Environmental Protection Agency using the Highway Fuel Economy Driving Schedule and

Urban Dynamometer Driving Schedule test cycles at 40 CFR parts 86 and 600.

(b) The "Special Test Procedures" provisions of 40 CFR 86.090-27 may be used to accommodate any special test procedures required for testing the energy consumption of electric vehicles.

#### § 474.5 Review and Update

The Department will review Part 474 five years after the date of publication as a final rule to determine whether any updates and/or revisions are necessary. DOE will publish a notice in the **Federal Register** soliciting stakeholder input in this review. The Department will publish the findings of the review and any resulting adjustments to Part 474 in the **Federal Register**.

#### Appendix to Part 474—Sample Petroleum-Equivalent Fuel Economy Calculations

*Example 1:* An electric vehicle is tested in accordance with Environmental Protection Agency procedures and is found to have an Urban Dynamometer Driving Schedule energy consumption value of 265 Watt-hours per mile and a Highway Fuel Economy Driving Schedule energy consumption value of 220 Watt-hours per mile. The vehicle is not equipped with any petroleum-powered accessories. The combined electrical energy consumption value is determined by averaging the Urban Dynamometer Driving Schedule energy consumption value and the Highway Fuel Economy Driving Schedule energy consumption value using weighting factors of 55 percent urban, and 45 percent highway:

$$\begin{aligned} \text{combined electrical energy consumption} \\ \text{value} &= (0.55 * \text{urban}) + (0.45 * \text{highway}) \\ &= (0.55 * 265) + (0.45 * 220) = 244.75 \\ \text{Wh/mile} \end{aligned}$$

Since the vehicle does not have any petroleum-powered accessories installed, the value of the petroleum equivalency factor is 82,049 Watt-hours per gallon, and the petroleum-equivalent fuel economy is:  $(82,049 \text{ Wh/gal}) (244.75 \text{ Wh/mile}) = 335.24 \text{ mpg}$

*Example 2:* The vehicle from Example 1 is equipped with an optional diesel-fired cabin heater/defroster. For the purposes of this example, it is assumed that the electrical efficiency of the vehicle is unaffected.

Since the vehicle has a petroleum-powered accessory installed, the value of the petroleum equivalency factor is 73,844 Watt-hours per gallon, and the petroleum-equivalent fuel economy is:

$$\begin{aligned} (73,844 \text{ Wh/gal}) (244.75 \text{ Wh/mile}) &= 301.71 \\ \text{mpg} \end{aligned}$$

[FR Doc. 00 14446 Filed 6/9/00; 8:45 am]

BILLING CODE 6450-01-P

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]; Rodgers, William (EEO)[William.Rodgers@vw.com]; Allen, Gregory (EEO)[Gregory.Allen@vw.com]  
**From:** Good, David  
**Sent:** Tue 12/2/2014 8:20:54 PM  
**Subject:** RE: 2015 FE Guide – Errors in Verify as of November 20, 2014

Richard,

This bug in verify was suppose to be corrected in the most recent Verify Tier 3 deployment (Nov 24, 2014).

You'll probably have to correct the errors one last time, but after that Verify won't shuffle the engine configurations when you make changes to a CSI.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, November 26, 2014 10:00 AM  
**To:** Good, David  
**Cc:** Snyder, Jim; Rodgers, William (EEO); Allen, Gregory (EEO)  
**Subject:** RE: 2015 FE Guide – Errors in Verify as of November 20, 2014

Hello Dave;

I know you will first see this mail next week, but we noticed another problem with regard to the engine displacements and are currently working on correcting this error.

This is the scenario we corrected earlier this year and now we have the same issue again due to changes made to the CSI when adding models and/or engine codes to the gasoline fueled test group FVGAV02.0APA with two engine displacements (2.0L and 1.8L). Currently, whenever a change is made to add a new engine code the order of the existing Verify CSI engine configurations gets shuffled around, so that carline with the 1.8L engine now become 2.0L in the

fuel economy information.

We asked that this issue be corrected in Verify several months ago but to our knowledge it has not been taken care of yet.

The following carlines, applicable test group engine displacements and label indexes are listed here for your convenience and should appear that way on the fuel economy guide website:

Carline	disp	Index #
A3	1.8L	007
A3 Cabriolet	1.8L	006
Golf	1.8L	085 & 103
Golf SportWagen	1.8L	not labeled yet
A3 quattro	2.0L	004
A3 Cabriolet quattro	2.0L	005
GTI	2.0L	001 & 008

Please contact me with questions. I will look forward to your next audit and will verify what you will send to the website contractor.

Best regards,

Richard

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Thursday, November 20, 2014 4:13 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** re: 2015 FE Guide – Errors in Verify as of November 20, 2014

Richard,

re: 2015 FE Guide – Errors in Verify as of November 20, 2014

Attached are the data in Verify as of November 20, 2014. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 FE Label data will be on December 2, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** [REDACTED] **Ex. 7** @vw.com  
**Cc:** [REDACTED] Ex. 7 @vw.com; Laroo, Chris[laroo.chris@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Wed 11/19/2014 4:25:15 PM  
**Subject:** RE: Tier 3 1066 regs seem to require 48" single roll dynos - does VW still use twin 24" electric dynos?

[Ex. 7]

To request approval to use your twin roll 24" electric dynamometers under the provisions of in 40 CFR 1066.10(c) and 1065.10(c)(7) (instead of using 48" or larger electric dynamometers specified in 40 CFR 1066.210), you should provide the following information:

- [REDACTED] Please provide comparison data for each of test cycle which you will be testing on the twin-roll dynamometers (e.g. FTP, hwy, US06, SC03, Cold FTP). This data should compare the twin roll results to the 48" single roll results for these test cycles.
- [REDACTED] Data should be provided using a representative test fuel for the types of vehicles which you will be testing on the twin-roll dynamometers (e.g. Tier3 ULSD diesel fuel, E10 gasoline (LEV3 E10 or Tier 3 E10), E85, etc).
- [REDACTED] The data should compare exhaust emission results for each constituent and fuel economy test results, including NMOG, CO, CO<sub>2</sub>, NO<sub>x</sub>, PM, HCHO, N<sub>2</sub>O, CH<sub>4</sub> and fuel economy. Your comparison should address bag data.
- [REDACTED] Data should be provided for the ETW range of vehicles which you will be testing on the twin-roll dynamometers.

Does VW intend use these dynamometers indefinitely, or will they be replaced in the not-too-distant future?

Dave

**From:** [REDACTED] **Ex. 7** @vw.com  
**Sent:** Friday, November 07, 2014 10:34 AM  
**To:** Good, David

Cc: [REDACTED] Ex. 7

**Subject:** RE: Tier 3 1066 regs seem to require 48" single roll dynos - does VW still use twin 24" electric dynos?

Hi Dave:

Hope all is well with you. We have exchanged some communications regarding the use of twin-roll dynos in the context of the requirement that §1066 specifies single 48-inch dynos as the standard. I have checked, and our colleagues at VWAG Wolfsburg still have some twin-roll dynamometers that they wish to use on a limited basis. In fact, we describe this in our certification preview letter, and state that we will follow-up with more details.

We plan to ask EPA to approve continued use of these dynamometers, and would appreciate some guidance regarding the type of information that EPA requires to make this decision. For example, would it be sufficient to show that under a specific test procedure, the twin-roll and single roll dynamometers yield equivalent emission results?

Any insight that you can provide would be appreciated.

Best regards,

[REDACTED] Ex. 7

---

**Ex. 7**

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone:

Cell:

E-Mail:

**Ex. 7**

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]

**Sent:** Tuesday, July 29, 2014 7:34 PM

**To:** **Ex. 7**

**Cc:**

**Ex. 7**

**Subject:** RE: Tier 3 1066 regs seem to require 48" single roll dynos - does VW still use twin 24" electric dynos?

**Ex. 7**

Thanks for checking on this for me.

I agree with you that although the Tier 3 Part 1066 regulations normally require single roll 48 inch diameter electric rolls, other dynamometers can be approved by EPA. So when the time comes, VW will need to request EPA approval to use your twin-roll 24 inch dynos under Part 1066.10(c) regulations.

I don't see any problems at this time----but the burden of proof will be on VW to demonstrate that your dynos are equivalent to single roll 48 inch diameter electric rolls.

Dave

**From:** [redacted] Ex. 7 **@vw.com]**  
**Sent:** Thursday, June 26, 2014 10:35 AM  
**To:** Good, David  
**Cc:** [redacted] Ex. 7  
**Subject:** RE: Tier 3 1066 regs seem to require 48" single roll dynos - does VW still use twin 24" electric dynos?

Hello Dave:

As you know, the VW Group has a number of test sites associated with the different brands. The Audi, Bentley and Lamborghini test sites use 48-inch dynamometers exclusively for emission certification. Volkswagen AG in Wolfsburg still has some smaller diameter twin-roll dynamometers.

I understand that during the rulemaking process (and beyond) the industry has discussed with EPA various aspects of the test procedures, including the specific reference to §1066.210 and the requirement regarding a minimum roll diameter of 120 cm. The use of twin-roll dynamometers was raised with EPA, and the EPA response from August 2012 was that the provisions of §1066.10(c) would apply to twin-roll dynamometers. I believe that Chris Laroo was the primary EPA contact for these discussions.

I also found the following when looking through the regulations; §1065.1(e) and §1066.1(f) include equipment specifications when identifying “procedures.” From the regs:

*Unless we specify otherwise, the terms ‘‘procedures’’ and ‘‘test procedures’’ in this part include all aspects of vehicle testing, including the equipment specifications, calibrations, calculations, and other protocols and procedural specifications needed to measure emissions.*

Best regards,

[Ex. 7]

---

# Ex. 7

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone

Cell: (

E-Mail

# Ex. 7

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]

**Sent:** Friday, June 20, 2014 10:21 AM

**To:**  Ex. 7

**Subject:** Tier 3 1066 regs seem to require 48" single roll dynos - does VW still use twin 24" electric dynos?

# Ex. 7

I was reading some of the Tier 3 regulations, and 40 CFR 1066.210 that the electric dynos have a minimum roll diameter of 120 cm (47.2 inches). As you know, manufacturers are required to use Parts 1065 & 1066 regulations beginning with the 2022 model year (some parts earlier).

About 10 years ago or so, I thought VW was using some twin roll 24" electric dynos.

Please double check on this when you get a chance, to see if you are still using any dynamometers other than the 48" (or larger) single roll. If so, do you plan to phase them out (or perhaps request to use them under 1066.10 and 1066.15 regs)? [It's not clear to me that 1066.10 and 1066.15 cover other "equipment"----they seem to discuss special test procedures and alternate test procedures only.]

Thanks

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Tue 11/18/2014 7:56:03 PM  
**Subject:** RE: EV cost to drive 25 miles

Richard,

I sent Janet a reminder.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Tuesday, November 18, 2014 2:40 PM  
**To:** Good, David  
**Subject:** EV cost to drive 25 miles

Hi Dave;

Did you hear anything with regard to the question to Janet (DOE contractor) regarding how the EV calculation is made to arrive at the cost to drive 25 miles which is available on the fuel economy guide website?

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** [REDACTED] **Ex. 7** @vw.com]  
**Cc:** [REDACTED] **Ex. 7** @vw.com]  
**From:** Good, David  
**Sent:** Thur 10/16/2014 10:05:42 PM  
**Subject:** FW: Re: Question about road-speed fans usage for 2016MY and later test vehicles  
[EPA-road-speed fan1-specs.714.pdf](#)

[REDACTED] **Ex. 7** [REDACTED]

Did you ever respond to my question about road-speed fans?

Dave

**From:** Good, David  
**Sent:** Wednesday, September 03, 2014 4:44 PM  
**To:** [REDACTED] **Ex. 7** @vw.com'  
**Cc:** [REDACTED] **Ex. 7** @vw.com'  
**Subject:** Re: Question about road-speed fans usage for 2016MY and later test vehicles

[REDACTED] **Ex. 7** [REDACTED]

Re: Question about road-speed fans usage for 2016MY and later test vehicles

As you know, the Tier 3 Part 1066 regulations allow manufacturers to use road-speed fans for Tier 2 and Tier 3 emission and fuel economy vehicles without obtaining prior EPA approval.

We have (more or less) told manufacturers that if they used a road-speed fan for their testing, EPA would also use a road-speed fan for any EPA confirmatory testing.

We would like to know your plans to use road-speed fans over the next several years so that there is no disruption in the EPA confirmatory testing process due to insufficient number of EPA road-speed fans. We currently have one road-speed fan (see attachment) and are considering whether to purchase an additional fan (or fans).

I would think that you would provided road-speed fan information to EPA in your 2016 certification preview meeting, including an outline of which 2016MY vehicles will be tested with road-speed fans, the specifications of your road speed fan(s), whether they meet EPA criteria outlined in 40 CFR 1066.105, and any other technical information as appropriate.

Please let us know in the next week or so approximately what percent of your 2016 and 2017 (if available) emission and fuel economy vehicles will be tested with road-speed fans and the timing----approximately when you expect to be submitting test requests to EPA for vehicles tested with road-speed fans. I don't need precise numbers---just approximate numbers will be fine.

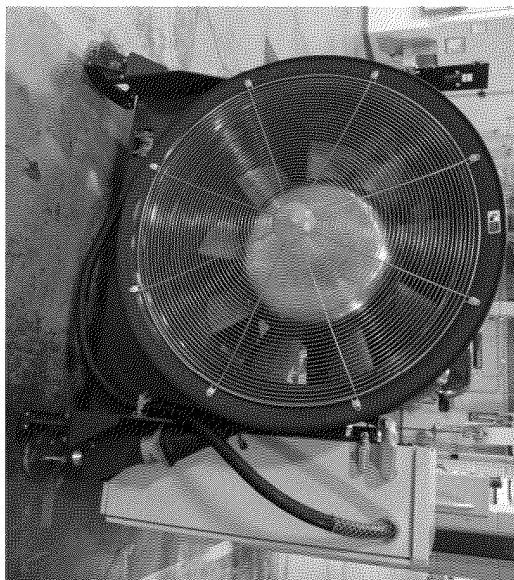
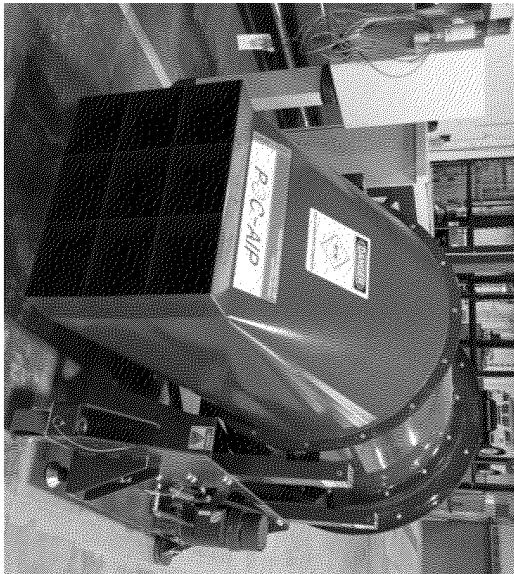
Thanks much

Dave

# TATD LD portable Road Speed Fan quick specifications

- Contractor:  
Prime One Contracting
- Flow area:  
31.5" wide x 24" tall
- Required flow velocity range:  
0 to 80 mph
- Outlet flow rate  
0 to 37,000 CFM (1050 m<sup>3</sup>/min)
- Motor Capacity  
≈75 hp
- Floor to bottom of duct:  
4" to 20" electronically adjustable
- Unit width  
≈ 84"
- Unit length  
≈ 92"
- Unit height for transport  
≈ 65"
- Unit ground clearance  
≈ 6"
- Approximate weight  
3800 lbs
- Restraint system  
Four restraint "feet"

- Meets flow delivery and uniformity requirements of 1066
- EPA added fixtures to allow the unit to be transported with a vehicle mover, also serve as restraints



**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 10/9/2014 7:48:56 PM  
**Subject:** RE: Battery Packs

Richard,

We prefer number of batteries, not modules. Go to [www.fueleconomy.gov](http://www.fueleconomy.gov) then scroll to the bottom of any page and click on ‘Download EPA’s MPG Ratings’ and open the 2014 & 2015 datafiles. Go to column 91 to see what other manufacturers are entering.

The Chevrolet Volt has 288 cells & 4 modules (from web) and they entered “1” battery.

The BMW I3 has 8 modules with 12 cells each and they entered 8 batteries.

The Tesla Model S has 16 modules, more than 7000 cells (from web) and they entered “1” battery.

Most mfrs list 1 battery for their EV or PHEVs. The most batteries for all EVs & PHEVs that I see in Verify is 12 for the Mercedes B-Class Electric Drive---and Mercedes probably listed modules, not batteries.

You decide.

Dave

**From:** Thomas, Richard (EEO) [mailto:[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)]  
**Sent:** Thursday, October 09, 2014 2:28 PM  
**To:** Good, David  
**Subject:** FW: Battery Packs

Hi Dave;

I am having trouble convincing my colleagues in calling the number of battery packs from the input for the test group and our e-Golf, as you can see below they ask for battery packs not number of batteries. So I think we are not speaking the same language here, but if you and your colleagues feel this term called battery packs refers to one container then it would be one battery and not 27 as we inserted here. Please be sure that this is what they are asking for in this field before we change it to one. The complete breakdown is as follows all in one container or battery.

27 modules. Within each module it is a series/parallel combination. Each cell has a nominal potential of 3.7 volts.

- 10 modules have 6 cells "2 pairs of 3 parallel cells in series" =60 cells
  - 17 modules have 12 cells "4 pairs of 3 parallel cells in series" =204 cells
  - TOTAL = 264 cells

Let me know.

**From:** Giles, Michael (EEO)  
**Sent:** Thursday, October 09, 2014 2:11 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** Battery Packs

## Test Group Dataset Submission

\* or  = required field

+ = CTRL-click to select multiple values

Test Group	Engine Configuration(s)	Hybrid/EV/Fuel Cell	Evap Stnds/Tests /Models
Test Group	FVGAV00.0VZZ	Model Year	
Hybrid Electric Vehicle And Fuel Cell Information			
Rechargeable Energy Storage Device	B = Battery(s) <input type="button" value="▼"/>	Rechargeable Energy	
Battery Type	LI = Lithium Ion <input type="button" value="▼"/>	Battery Type If "Other"	
Number of Battery Packs (not cells)	27	Total Voltage of Batter	
Battery Energy Capacity (Ah)	75	Battery Specific Energ	
Battery Charger Type	OFF = Off-board <input type="button" value="▼"/>		

Michael Giles

Certification Engineer

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4229

Fax: 248 754 4207

mailto: [Michael.Giles@VW.com](mailto:Michael.Giles@VW.com)

## Test Group Dataset Submission

\* or  = required field

† = CTRL-click to select multiple values

Test Group	Engine Configuration(s)	Hybrid/EV/Fuel Cell	Evap Stnds/Tests /Models
FVGAW00.0VZZ			
Test Group			Model Year
Hybrid Electric Vehicle And Fuel Cell Information			2015
Rechargeable Energy Storage Device	B = Battery(s) 		Rechargeable Energy Storage Device If "Other"
Battery Type	Li = Lithium Ion 		Battery Type If "Other"
Number of Battery Packs (not cells)	27 		Total Voltage of Battery Pack(s) (Volts)
Battery Energy Capacity (Ah)	75 		Battery Specific Energy (Wh/kg)
Battery Charger Type	OFF = Off-board 		

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**Cc:** Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Good, David  
**Sent:** Tue 10/7/2014 3:24:58 PM  
**Subject:** RE: 2015 FE Guide - Data in Verify as of Oct 2, 2014 - including the eGolf  
VW Group 2015 FEGuide-all rel dates-no-sales-10-2-2014.xlsx

Richard,

I'm sorry----the fuel cost error statements in the dataset are incorrect.

The EPA EV calculator calculates annual fuel cost correctly. I didn't have the calculator results when I sent you the dataset errors. The macro's calculations of \$500 annual fuel cost and \$8500 5-year savings are wrong.

The spreadsheet calculations are based on the equation in 600.311-12(e). In that equation, it doesn't make sense to round miles per kW-hr---so that's why the calculator used the unrounded value.

So the values you input into Verify were correct (\$550 annual fuel cost and \$8250 for the 5-year savings).

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Monday, October 06, 2014 8:27 AM  
**To:** Good, David  
**Cc:** Giles, Michael (EEO)  
**Subject:** RE: 2015 FE Guide - Data in Verify as of Oct 2, 2014 - including the eGolf

Hi Dave;

I assume you are not in today but back on Tuesday. This is what I found, I used the same EPA EV calculator that you sent again and found that the calculator does not use a rounded combined kW-hr/100 mi number but rather an unrounded value of 29.2205 which then multiplied by the 15,000 miles and times the 0.12 cents gives a value of 525.9690 which then rounds to the \$550 value I entered into verify. If I use a rounded value of 29 kW-hr/100 mi I get your \$500 annual fuel cost value. It appears that Verify uses a rounded value. I also noticed that the unrounded fuel cost number in the calculator takes the unrounded adjusted combine value in miles per kW-hr and not the 29 rounded kW-hr/100 mi value. So maybe the calculator needs to be undated to use the rounded combined kW-hr/100 mile value in the annual fuel cost calculation. What do you think?

Thanks,

Richard

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Friday, October 03, 2014 3:50 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** 2015 FE Guide - Data in Verify as of Oct 2, 2014 - including the eGolf

Richard,

Our macro picked up a few errors for the eGolf.

I couldn't double check your values since I don't have your spreadsheet calculator for the eGolf (and I didn't bother to look in Verify for the test data). I'll attach a generic EV spreadsheet for your convenience (although I think I've sent it to you before).

I get \$500 for the annual fuel cost, as follows:

Ann Fuel Cost = 15,000 miles x 29 kW-hr/100 miles x \$0.12 per kW-hr = \$522, which rounds to \$500.

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Fri 10/3/2014 7:49:44 PM  
**Subject:** 2015 FE Guide - Data in Verify as of Oct 2, 2014 - including the eGolf  
VW\_Group\_2015\_FEGuide-all\_rel\_dates-no-sales-10-2-2014.xlsx  
2015 generic EV Label calculations-1-18-13.xlsm

Richard,

Our macro picked up a few errors for the eGolf.

I couldn't double check your values since I don't have your spreadsheet calculator for the eGolf (and I didn't bother to look in Verify for the test data). I'll attach a generic EV spreadsheet for your convenience (although I think I've sent it to you before).

I get \$500 for the annual fuel cost, as follows:

Ann Fuel Cost = 15,000 miles x 29 kW-hr/100 miles x \$0.12 per kW-hr = \$522, which rounds to \$500.

Dave

**To:** Olechiw, Michael[olechiw.michael@epa.gov]; Passavant, Glenn[passavant.glen@epa.gov]; Fernandez, Antonio[fernandez.antonio@epa.gov]; Wysor, Tad[wysor.tad@epa.gov]; Stout, Alan[stout.alan@epa.gov]; Good, David[good.david@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Laroo, Chris[laroo.chris@epa.gov]  
**From:** Ex. 7  
**Sent:** Mon 8/18/2014 7:17:29 PM  
**Subject:** RE: USEAP/Volkswagen Meeting - Tier 3 Implementation  
EPA Meeting Report Tier 3 Implementation July 16 2014 Draft.pdf  
8\_Carry-over-Examples\_update1.pdf

To all:

Please see the e-mail from July 18, 2014 below. It distributed a draft meeting report from the July 16, 2014 USEPA/VW Group meeting on Tier 3 implementation.

Your reaction to our summary of the meeting would be appreciated. There were also a few open points that EPA was going to check. For the most part, the open points are contained in Agenda item 8 covering LEV III Certification and Carryover to Tier 3. Please see the bold-print items in the "Follow-Up Action" column of the report. I have attached copies of the report and the revised version of the carryover slides, distributed with my earlier e-mail, for your convenience.

We would appreciate your input so that we are able to close the open points.

Best regards,

Ex. 7

Ex. 7

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone:

**Ex. 7**

Cell:

**Ex. 7**

E-Mail:

**Ex. 7**

**From:** **Ex. 7**

**Sent:** Friday, July 18, 2014 11:26 AM

**To:** Michael Olechiw (Olechiw.Michael@epamail.epa.gov); Glenn Passavant/AA/USEPA/US (Passavant.Glenn@epamail.epa.gov); Antonio Fernandez/AA/USEPA/US (Fernandez.Antonio@epamail.epa.gov); wysor.tad@epa.gov; Alan Stout/AA/USEPA/US (Stout.Alan@epamail.epa.gov); David Good (Good.David@epamail.epa.gov); Snyder.jim@Epa.gov; Wright, DavidA (Wright.DavidA@epa.gov); 'Laroo.chris@Epa.gov'

**Cc:**

**Ex. 7**

**Ex. 7**

**Subject:** USEAP/Volkswagen Meeting - Tier 3 Implementation

To all:

On July 16, 2014, representatives from the Volkswagen Group met with EPA staff to discuss topics related to the implementation of the Tier 3 requirements. Copies of the presentation materials were distributed by e-mail on July 15, 2014. Subsequent to the meeting, Volkswagen prepared a meeting report. It presents a brief discussion and conclusions drawn for each of the agenda topics. It also points out areas where further action is required and/or EPA confirmation is requested (specified in bold typeface).

We would particularly like to direct EPA's attention to Agenda Item 8, LEV III Certification and Carryover to Tier 3. A revised version of the slides for this item is attached. The revisions are shown in red. Slide 7 from the original deck addressed the topic of Tier 3 Evap. This is not included in the new deck since we agreed on the information presented and do not believe that further discussion is required. Slides 6 and 7 of the new deck address the topic of applicable test

procedures and carryover implications. The new Slide 7 presents Volkswagen's understanding of the EPA explanation from the meeting regarding the test procedures that apply to various vehicle concepts, assuming that the concepts are "carried over" through their lifespan. The test procedures referred to as Part 1066 Stage 1 and Stage 2, are as described on the new Slide 6. Slides 8 and 9 are included for reference.

Volkswagen appreciates the opportunity to meet with you, and looks forward to your comments on the report.

Best regards,

**Ex. 7**

---

# **Ex. 7**

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: **Ex. 7**

Cell: **Ex. 7**

E-Mail: **Ex. 7**

## Meeting Report – Tier 3 Implementation

U.S. Environmental Protection Agency

Ann Arbor, Michigan

July 16, 2014

**D R A F T**

### U.S.EPA Participants:

Glenn Passavant (ASD)  
Tony Fernandez (ASD)  
Tad Wysor (ASD)  
Alan Stout (ASD)  
Dave Good (CD)  
Jim Snyder (CD)  
David Wright (CD)

ASD – Assessment and Standards Division  
CD – Compliance Division

### Volkswagen Group Participants:

Stuart Johnson – VWGoA  
Jenny Sigelko – VWGoA  
Leonard Kata – VWGoA  
Lothar Rech – Audi AG  
Carsten Stang – Audi AG  
  
Telephone  
Hannah Schlueter – VWAG  
Aron Kuntze – VWAG  
Garett Horton – VWAG  
William Rodgers – VWGoA  
Mike Giles – VWGoA  
Greg Allen – VWGoA

Topics align with the Agenda items.

Topic	Discussion/Conclusions	Follow-Up Action
1. EPA Tier 3 final regulation and content of update	For <6,000 lbs., no Tier 2 vehicles beginning 2017. Must be Tier 3 or Interim Tier 3. Before 2017, can have "Early" Tier 3 or Tier 2.	Status of regulation updates: <ul style="list-style-type: none"><li>• Direct Final Rule signed by the end of CY2014.</li><li>• Effective 60 days following publication in the FR; if no adverse comments within 30 days.</li></ul>
2. Compliance Road map	EPA has no chart for Tier 3 implementation; none planned. Tier 3 implementation is simply an extension of Tier 2; "only a standards change."	
3. Early credits for LEV III concepts (against LEV III requirements or 160mg)	In general, the calculation appears correct (per EPA). Confirmation that credits for early Tier 3 concepts are compared against 0.160 g/mi. EPA stated that the standard is not changed for vehicles that qualify for a 15/150 warranty, 0.005 g/mi FTP credit. This is deducted at the end of the calculation.	

4. Confirmation of Tier 3 credit and early credit calculation	For Early credit, EPA reminded that the “50-state compliance” statement should be Nationwide minus California/Section 177 states.	EPA agreed with each of the steps in the calculation. Discussion of the “ratio.” EPA agreed that the result is the same.
5. EPA template for Tier 3 Credit calculation	EPA stated that they will validate each manufacturer’s compliance calculation.	Volkswagen will approach the Volkswagen will approach the Alliance on this topic.
6. Sales basis for Tier 3 calculation ( FTP, SFTP / Zero Evap / PM ... phase-in's	EPA confirmed the sales basis for FTP+SFTP, PM and evaporative emissions fleet average calculations.	EPA suggested that this would be a good project for the industry and EPA (e.g., through the Alliance and Global Automakers).
7. Tier 3 Compliance reports	EPA plans to not provide a template for annual reporting. Reporting is company-unique.	There is a potential for a pre-model year report, if the manufacturer plans to use an alternate phase-in scheme. To be presented at the certification preview meeting.
8. LEV III Certification and carry over to Tier 3	<u>Example A</u> Carryover of DF into the Tier 3 program would be accepted for PZEV. For other concepts, a report based on good engineering judgment is required (including a discussion of the effect of E10).  Leak test applies beginning with MY2018, even for carryover concepts (PID \$14).	<u>Example A</u> Volkswagen corrected leak test from MY2018, inserted PM standard.  EPA to check on carryover for exhaust for MY2020.

	<u>Example B</u> EPA agreed to Example B; however, delete the footnote re: Opt. CA PH2.	<u>Example B</u> Volkswagen corrected leak test from MY2018, inserted PM standard.
	Can carryover CA PH3 fuel forever. When will EPA use Tier 3 fuel for in-use testing?	<u>Request EPA confirmation of applicable model year.</u>
	<u>Example C</u> Accepted by EPA.	<u>Example C</u> Volkswagen corrected leak test from MY2018, inserted PM standard.
	<u>Example D</u> EPA pointed out the 150K FUL not required until MY2020 or 2021(?)	<u>Example D</u> Volkswagen updated the FUL column.
	Tires are required for evaporative emission tests. They can be aged, within constraints (§1066.810). <u>Section 86.101 Updates</u>	Examples A through D have been updated and attached to the report for EPA review and confirmation. <u>Tier 3 Evap</u> <u>Section 86.101 Updates</u>
	In response to VW question regarding carryover of 2021 to 2022, EPA stated that they would not require testing to 1066 if that is the only reason for a retest.	Volkswagen corrected slide.
	Leak test starts in MY2018	

	In general, EPA agreed with VW carryover request.	Volkswagen developed a timeline for different concepts under Tier 2 and Tier 3 programs, indicating when the appropriate test procedures apply. See attached slides. Volkswagen requests EPA confirmation.
9. Example and approval of DDV test matrix(Gasoline)	<p>Asked EPA about assigned DFs for Tier 3. EPA said that this is low priority and that we should meet with them if we need assigned DFs.</p> <p>LEV III/Tier 3 ADP test schedule with optional test points – EPA accepted.</p> <p>Gasoline DDV Example of Test Procedure – EPA agreed to the proposed test schedule and advised that we use good engineering judgment.</p> <p>EPA accepted use of the FTP DFs for all other tests. Regarding the potential use of optional DFs (Cold CO, US06, SC03), EPA stated that most manufacturers use the FTP DFs for the other cycles. EPA advised that we use good engineering judgment.</p> <p>For DDV and Evap testing, EPA does not require evaporative emission testing of DDVs. EPA accepted the proposal.</p> <p>EPA repeated that evaporative emission durability requires maximum ethanol content available in commercial fuel (currently E15).</p>	<p><u>Other</u></p> <p>Discussion regarding MY2016 VECI labels.</p> <p>VW to provide samples of MY2016 VECI labels for EPA review.</p>

10. Tier 3 Evap Compliance • Calculation and Credit debit trading	<p>EPA observed that by IUVIP, there is nearly no deterioration of evaporative emissions in the field.</p> <p>The calculation procedure with the 1160 threshold value is used when the 20/20 option is applied. The 20/20 option represents 20% Tier 3 evaporative emissions standard and 20% leak detection; MY 2017 only.</p> <p>EPA agreed with the Tier 3 Evap Compliance Calculations as presented.</p>
--	--

**To:** Good, David[good.david@epa.gov]  
**Cc:** [redacted] Ex. 7 [redacted] @vw.com; [redacted] Ex. 7 [redacted] @vw.com; [redacted] Ex. 7 [redacted]  
**From:** [redacted] Ex. 7 [redacted]  
**Sent:** Mon 8/18/2014 6:30:34 PM  
**Subject:** RE: 2015 Printed Fuel Economy Guide Place Holder Volkswagen e-Golf  
VWGoA-Placeholder\_Info\_EV-PHEV-etc-(dgood) for 2015 Printed Guide.xlsx

Hi Dave;

Here is the Excel file you sent with all the information I can provide at this time. I don't have interior and luggage volumes to provide to you at this time, but know it is expected to be in the EPA Compact class. If you have any other questions please contact me.

Best regards,

[redacted] Ex. 7 [redacted]

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Monday, August 18, 2014 1:56 PM  
**To:** [redacted] Ex. 7 [redacted]  
**Cc:** [redacted] Ex. 7 [redacted]  
**Subject:** RE: 2015 Printed Fuel Economy Guide Place Holder Volkswagen e-Golf

[redacted] Ex. 7 [redacted]

I didn't receive the Excel file. Attached is a generic placeholder file which you can use.

Dave

**From:** [redacted] Ex. 7 [redacted] @vw.com  
**Sent:** Wednesday, August 13, 2014 8:23 AM  
**To:** Good, David  
**Cc:** [redacted] Ex. 7 [redacted]

**Subject:** 2015 Printed Fuel Economy Guide Place Holder Volkswagen e-Golf

Hi Dave;

Per the EPA August 5<sup>th</sup> guidance letter CD-14-16 we are providing information for a place holder in the printed version of the 2015 fuel economy guide for the Volkswagen "e-Golf", battery electric vehicle. This model falls in the Compact class and equipped with an 85 kW AC Permanent Magnet Synchronous Motor and Lithium-Ion battery.

If you need anything else to secure its mention in the printed guide please contact me directly.

Best regards,

**Ex. 7**

**Ex. 7**

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone:

Fax:

mailto:

**Ex. 7**



**To:** Good, David[good.david@epa.gov]  
**From:** Schmidt, Oliver (EEO)  
**Sent:** Mon 8/18/2014 5:57:09 PM  
**Subject:** Automatic reply: 2015 Printed Fuel Economy Guide Place Holder Volkswagen e-Golf

Hello,

thank you for your mail.  
I am currently on vacation.

Oliver Schmidt

**To:** Good, David[good.david@epa.gov]  
**Cc:** [redacted] **Ex. 7** [redacted]@vw.com]; [redacted] **Ex. 7** [redacted]@vw.com]; **Ex. 7**  
[redacted] **Ex. 7** [redacted]@vw.com]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 8/13/2014 12:22:53 PM  
**Subject:** 2015 Printed Fuel Economy Guide Place Holder Volkswagen e-Golf

Hi Dave;

Per the EPA August 5<sup>th</sup> guidance letter CD-14-16 we are providing information for a place holder in the printed version of the 2015 fuel economy guide for the Volkswagen “e-Golf”, battery electric vehicle. This model falls in the Compact class and equipped with an 85 kW AC Permanent Magnet Synchronous Motor and Lithium-Ion battery.

If you need anything else to secure its mention in the printed guide please contact me directly.

Best regards,

**Ex. 7**

**Ex. 7**

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone:

**Ex. 7**

Fax:

mailto:

**Ex. 7**

**To:** Good, David[good.david@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Mon 8/11/2014 12:35:26 PM  
**Subject:** RE: re: 2015 FE Guide - Errors in EPA's data base as of August 1, 2014

Thanks Dave, I corrected index record #106 for the Touareg Hybrid and set the stop/start indicator to yes.

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Friday, August 08, 2014 5:28 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** RE: re: 2015 FE Guide - Errors in EPA's data base as of August 1, 2014

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of August 8, 2014

Attached are the data in Verify as of August 8, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on Aug 15, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks



**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Tue 8/5/2014 10:19:54 AM  
**Subject:** 2013 CAFE/GHG Reports in Verify

Hi Dave;

As we discussed yesterday, Dale Harris sent you a copy of the GHG report that was entered into Verify. Were you able to read this file and were you able to locate this April 30<sup>th</sup> letter with attachments in Verify? We were not able to find a tool to locate or see it in Verify.

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist  
Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: Richard.Thomas@VW.com

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Mon 8/4/2014 4:59:50 PM  
**Subject:** RE: Corrected Index 64 and 65

Okay thanks.

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Monday, August 04, 2014 12:58 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: Corrected Index 64 and 65

Richard,

I already sent the file to DOE for posting on the web. I'll make sure these are in the next dataset I send to DOE---on 8/9/2014 or so.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Monday, August 04, 2014 11:17 AM  
**To:** Good, David  
**Subject:** Corrected Index 64 and 65

Hi Dave;

I found a typo error of the 5-cycle city unrounded value (i.e.: 24.3584 MPG should be 21.3584) so I corrected both those Audi labels in Verify. Has your file already gone to the contractor, can you correct those and send again?

Thanks,

RET

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Good, David[good.david@epa.gov]  
**Cc:** [REDACTED] Ex. 7 @vw.com]; [REDACTED] Ex. 7  
[REDACTED] Ex. 7 @vw.com]  
**From:** Harris, Dale (EEO)  
**Sent:** Mon 8/4/2014 3:05:30 PM  
**Subject:** RE: 2013 VW Group CAFE/GHG Report  
CBI DVWXV COMMON CR1A CAR R02.pdf

Dave

Attached is the MY 2013 Final GHG Report that was submitted to Verify in April 2014. Please let me know if there are any questions. Thanks!!!

Regards,

**Ex. 7**

VOLKSWAGEN Group of America, Inc.

Engineering and Environmental Office (EEO)  
3800 Hamlin

AuburnHills Michigan 48326

United States of America

P: [REDACTED] **Ex. 7** [REDACTED]

E: [REDACTED] **Ex. 7** [REDACTED]

**From:** [REDACTED] Ex. 7 [REDACTED]  
**Sent:** Monday, August 04, 2014 8:36 AM  
**To:** [REDACTED] Ex. 7 [REDACTED]

**Subject:** FW: 2013 VW Group CAFE/GHG Report  
**Importance:** High

Hi guys:

Is Dave looking for the information that was sent to Gina McCarthy cc: Rob French in mid-May? Please check. Was the requested information uploaded to VERIFY?

Best regards,

**Ex. 7**

---

# **Ex. 7**

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: **Ex. 7**

Cell: **Ex. 7**

E-Mail: **Ex. 7**

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Friday, August 01, 2014 5:52 PM  
**To:** **Ex. 7**

**Cc:** [redacted] Ex. 7 Snyder, Jim  
**Subject:** 2013 VW Group CAFE/GHG Report

[redacted] **Ex. 7**

I looked in Verify for your 2013 CAFE GHG reports and found two letters dated 3/17/2014--- one for cars and one for trucks. The letters have some calculation information (but don't use the EPA templates like the 2012 VW CAFE/GHG report did) and don't mention anything about AC credits, provide the SAE J2727 A/C leakage worksheets, off cycle credits, CH4 & N2O debits, etc.

The letters are also missing the summary pages of GHG fleet average credits/debits, A/C credits, total credits for the 2013 model year. Most manufacturers also include an AB&T page (like the EPA GHG template) which tallies up the credits/debits for the 2009-2013 model years.

Both of the 3/17/2017 letters indicate that "Volkswagen intends to provide additional information required by 86.1865-12 by May 1, 2014."

Please email me a copy of the "additional information" letters for cars and trucks and enter a pdf copy of them in Verify's document module when you get a chance.

Thanks

**To:** Good, David[good.david@epa.gov]  
**Cc:** [REDACTED] Ex. 7 [REDACTED]@vw.com]  
**From:** [REDACTED] Ex. 7 [REDACTED]  
**Sent:** Wed 7/30/2014 1:21:59 PM  
**Subject:** 2015 Audi RS7 Relabeled

Hi Dave;

Thanks for the discussion this morning. Because we were unable to determine a predominate mode of use for the driver selectable transmission modes, we have relabeled the 2015 Audi RS7 equipped with the 560 HP twin turbo 4.0L V8 engine. These relabeled lower label fuel economy values are derived from test results in the "S" transmission mode and then averaged together with the "D" mode at the required 50/50 weighting. The new lower label values are in production now and dealers holding 2015 Audi RS7 models will get replacement labels. This model has no gas guzzler tax required after this relabeling.

There were 17 units already sold and we do not plan to make any notification to these retail customers announcing any new values and see no regulatory obligation to do so, although we understand that any notification to owners would be optional. Please respond to this mail with your concurrence regarding notification to these 2015 Audi RS7 owners.

Best regards,

**Ex. 7**

**Ex. 7**

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Phone:

Fax:

mailto:

**Ex. 7**

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Tue 9/9/2014 4:28:23 PM  
**Subject:** 2015 FE Guide  
VW\_Group\_2015 FEGuide-all rel dates-no-sales-8-28-2014.xlsx

Richard,

Attached is the data I sent to DOE on 8/29/2014 for the 2015 Printed Guide.

I guess there was one error in the Jetta Hybrid (which I corrected). Please revise Verify when you get a chance.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** oliver.schmidt@vw.com[oliver.schmidt@vw.com]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Fri 8/22/2014 11:46:09 PM  
**Subject:** re: 2015 FE Guide - Data EPA's database as of Aug 22, 2014 for your review; on Aug 28, 2014 I will send error free Verify data to DOE for the 2015 Printed Guide & the web  
VW Group 2015 FEGuide-all rel dates-no-sales-8-22-2014.xlsx

Richard,

re: 2015 FE Guide - Data EPA's database as of Aug 22, 2014 for your review; on Aug 28, 2014 I will send error free Verify data to DOE for the 2015 Printed Guide & the web

Attached are the data in Verify as of August 22, 2014 for your review. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov) or included in the 2015 Printed Guide. This file doesn't include label information for EV, PHEV, or fuel cell vehicles. I'll send them to you next week (for any new labels).

Please make any needed corrections to Verify when you get a chance.

I'm out of the office on Monday (8/25) but back on Tuesday.

Thanks

Dave

**To:** [redacted] **Ex. 7** @vw.com]  
**From:** Good, David  
**Sent:** Fri 8/22/2014 2:28:05 PM  
**Subject:** FW: 2015 Printed Fuel Economy Guide Place Holder Volkswagen e-Golf [Thanks] NNTO  
VWGoA-Placeholder\_Info\_EV-PHEV-etc-(dgood) for 2015 Printed Guide.xlsx

**From:** [redacted] **Ex. 7** @vw.com]  
**Sent:** Monday, August 18, 2014 2:31 PM  
**To:** Good, David  
**Cc:** [redacted] **Ex. 7**  
**Subject:** RE: 2015 Printed Fuel Economy Guide Place Holder Volkswagen e-Golf

Hi Dave;

Here is the Excel file you sent with all the information I can provide at this time. I don't have interior and luggage volumes to provide to you at this time, but know it is expected to be in the EPA Compact class. If you have any other questions please contact me.

Best regards,

[redacted] **Ex. 7**

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Monday, August 18, 2014 1:56 PM  
**To:** [redacted] **Ex. 7**  
**Cc:** [redacted] **Ex. 7**  
**Subject:** RE: 2015 Printed Fuel Economy Guide Place Holder Volkswagen e-Golf

[redacted] **Ex. 7**

I didn't receive the Excel file. Attached is a generic placeholder file which you can use.

Dave

**From:** [REDACTED] **Ex. 7** **[@vw.com]**  
**Sent:** Wednesday, August 13, 2014 8:23 AM  
**To:** Good, David  
**Cc:** [REDACTED] **Ex. 7**  
**Subject:** 2015 Printed Fuel Economy Guide Place Holder Volkswagen e-Golf

Hi Dave;

Per the EPA August 5<sup>th</sup> guidance letter CD-14-16 we are providing information for a place holder in the printed version of the 2015 fuel economy guide for the Volkswagen "e-Golf", battery electric vehicle. This model falls in the Compact class and equipped with an 85 kW AC Permanent Magnet Synchronous Motor and Lithium-Ion battery.

If you need anything else to secure its mention in the printed guide please contact me directly.

Best regards,

[REDACTED] **Ex. 7** [REDACTED]

**Ex. 7**

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone:

Fax:

mailto:

**Ex. 7**

**To:** Good, David[good.david@epa.gov]  
**From:** Sigelko, Jenny (EEO)  
**Sent:** Tue 7/29/2014 11:34:34 PM  
**Subject:** Automatic reply: Tier 3 1066 regs seem to require 48" single roll dynos - does VW still use twin 24" electric dynos?

Thank you for your email. I will have intermittent access to email July 29 & 30. Please allow extra time for a response. I will respond to your email as fast as possible.

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Tue 7/29/2014 1:02:46 PM  
**Subject:** 2015 Fuel Economy Labels

Hi Dave;

If you are in the office today, could you give me a call regarding 2015 fuel economy labels?

Thanks,

RET

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

<mailto:Richard.Thomas@VW.com>

**To:** Good, David[good.david@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Mon 7/28/2014 11:22:01 AM  
**Subject:** RE: 2015 FE Guide - Errors in EPA's data base as of July 23, 2014

Hi Dave;

Thanks for your phone message and mail. I made corrections to six label indexes in Verify to set the five year fuel savings or spending to the correct values. Two of those cases were flagged because I used a zero value for the spending field instead of zero in the fuel savings field. In our case, all values used on fuel economy labels were correct and on the Monroney labels used in the field. No incorrect fuel economy labels were used on port released vehicles.

Thanks,

Richard

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Friday, July 25, 2014 7:47 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of July 23, 2014

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of July 23, 2014

Attached are the data in Verify as of July 23, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

Note: The macro hadn't been double checking your 5 year fuel costs previously. I corrected the macro

today. It did pick up a few errors, but most manufacturers had calculated the 5-year "You Save" or "You Spend" values correctly. Call me or email me if you need to discuss it a little. DOE doesn't use those values for [www.fueleconomy.gov](http://www.fueleconomy.gov)---they calculate their own values based on the weekly average fuel prices in the U.S.

The next normal posting of 2015 FE Label data will be on Aug 1, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

I'm out of the office on Monday but back on Tues (7/29).

Thanks

**To:** Boundy, Robert Gary (boundyrg@ornl.gov)[boundyrg@ornl.gov]  
**Cc:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Thur 7/24/2014 11:12:04 AM  
**Subject:** 2015 Lamborghini Huacan Image  
Huracan\_Giallo\_Midas.png

Hi Bob;

I'm not sure if you still take care of this or not, but I have attached an image of the 2015 Lamborghini Huracan which can be used for the 2015 website of the fuel economy guide and that model index #025. The last time I looked there was no image on the website, so to make sure you have one, here you go.

Thanks and best regards,

Richard

Richard E. Thomas

Senior Emission Certification Specialist  
Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: Richard.Thomas@VW.com



**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Tue 7/22/2014 12:06:37 PM  
**Subject:** RE: 2015 FE Guide attached

Thanks Dave.

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Monday, July 21, 2014 7:11 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** 2015 FE Guide attached

Richard,

Here is the FE Guide as of approx 10AM this morning---just as the macro ran---I didn't have time to clean up the data and check for errors.

It looks OK to me.

Dave

**To:** Olechiw, Michael[olechiw.michael@epa.gov]; Passavant, Glenn[passavant.glen@epa.gov]; Fernandez, Antonio[fernandez.antonio@epa.gov]; Wysor, Tad[wysor.tad@epa.gov]; Stout, Alan[stout.alan@epa.gov]; Good, David[good.david@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Laroo, Chris[laroo.chris@epa.gov]

**Cc:**

Ex. 7

# Ex. 7

**From:** Ex. 7  
**Sent:** Fri 7/18/2014 3:25:54 PM  
**Subject:** USEAP/Volkswagen Meeting - Tier 3 Implementation  
EPA Meeting Report Tier 3 Implementation July 16 2014 Draft.pdf  
8\_Carry-over-Examples\_update1.pdf

To all:

On July 16, 2014, representatives from the Volkswagen Group met with EPA staff to discuss topics related to the implementation of the Tier 3 requirements. Copies of the presentation materials were distributed by e-mail on July 15, 2014. Subsequent to the meeting, Volkswagen prepared a meeting report. It presents a brief discussion and conclusions drawn for each of the agenda topics. It also points out areas where further action is required and/or EPA confirmation is requested (specified in bold typeface).

We would particularly like to direct EPA's attention to Agenda Item 8, LEV III Certification and Carryover to Tier 3. A revised version of the slides for this item is attached. The revisions are shown in red. Slide 7 from the original deck addressed the topic of Tier 3 Evap. This is not included in the new deck since we agreed on the information presented and do not believe that further discussion is required. Slides 6 and 7 of the new deck address the topic of applicable test procedures and carryover implications. The new Slide 7 presents Volkswagen's understanding of the EPA explanation from the meeting regarding the test procedures that apply to various vehicle concepts, assuming that the concepts are "carried over" through their lifespan. The test procedures referred to as Part 1066 Stage 1 and Stage 2, are as described on the new Slide 6. Slides 8 and 9 are included for reference.

Volkswagen appreciates the opportunity to meet with you, and looks forward to your comments on the report.

Best regards,

**Ex. 7**

---

**Ex. 7**

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: **Ex. 7**

Cell: **Ex. 7**

E-Mail: **Ex. 7**

## Meeting Report – Tier 3 Implementation

U.S. Environmental Protection Agency

Ann Arbor, Michigan

July 16, 2014

**D R A F T**

### U.S.EPA Participants:

Glenn Passavant (ASD)  
Tony Fernandez (ASD)  
Tad Wysor (ASD)  
Alan Stout (ASD)  
Dave Good (CD)  
Jim Snyder (CD)  
David Wright (CD)

ASD – Assessment and Standards Division  
CD – Compliance Division

### Volkswagen Group Participants:

Stuart Johnson – VWGoA  
Jenny Sigelko – VWGoA  
Leonard Kata – VWGoA  
Lothar Rech – Audi AG  
Carsten Stang – Audi AG  
  
Telephone  
Hannah Schlueter – VWAG  
Aron Kuntze – VWAG  
Garett Horton – VWAG  
William Rodgers – VWGoA  
Mike Giles – VWGoA  
Greg Allen – VWGoA

Topics align with the Agenda items.

Topic	Discussion/Conclusions	Follow-Up Action
1. EPA Tier 3 final regulation and content of update	For <6,000 lbs., no Tier 2 vehicles beginning 2017. Must be Tier 3 or Interim Tier 3. Before 2017, can have "Early" Tier 3 or Tier 2.	Status of regulation updates: <ul style="list-style-type: none"><li>• Direct Final Rule signed by the end of CY2014.</li><li>• Effective 60 days following publication in the FR; if no adverse comments within 30 days.</li></ul>
2. Compliance Road map	EPA has no chart for Tier 3 implementation; none planned. Tier 3 implementation is simply an extension of Tier 2; "only a standards change."	
3. Early credits for LEV III concepts (against LEV III requirements or 160mg)	In general, the calculation appears correct (per EPA). Confirmation that credits for early Tier 3 concepts are compared against 0.160 g/mi. EPA stated that the standard is not changed for vehicles that qualify for a 15/150 warranty, 0.005 g/mi FTP credit. This is deducted at the end of the calculation.	

4. Confirmation of Tier 3 credit and early credit calculation	For Early credit, EPA reminded that the “50-state compliance” statement should be Nationwide minus California/Section 177 states.	EPA agreed with each of the steps in the calculation. Discussion of the “ratio.” EPA agreed that the result is the same.
5. EPA template for Tier 3 Credit calculation	EPA stated that they will validate each manufacturer’s compliance calculation.	Volkswagen will approach the Volkswagen will approach the Alliance on this topic.
6. Sales basis for Tier 3 calculation ( FTP, SFTP / Zero Evap / PM ... phase-in's	EPA confirmed the sales basis for FTP+SFTP, PM and evaporative emissions fleet average calculations.	EPA suggested that this would be a good project for the industry and EPA (e.g., through the Alliance and Global Automakers).
7. Tier 3 Compliance reports	EPA plans to not provide a template for annual reporting. Reporting is company-unique.	There is a potential for a pre-model year report, if the manufacturer plans to use an alternate phase-in scheme. To be presented at the certification preview meeting.
8. LEV III Certification and carry over to Tier 3	<u>Example A</u> Carryover of DF into the Tier 3 program would be accepted for PZEV. For other concepts, a report based on good engineering judgment is required (including a discussion of the effect of E10). Leak test applies beginning with MY2018, even for carryover concepts (PID \$14).	<u>Example A</u> Volkswagen corrected leak test from MY2018, inserted PM standard. <b>EPA to check on carryover for exhaust for MY2020.</b>

	<u>Example B</u> EPA agreed to Example B; however, delete the footnote re: Opt. CA PH2.	<u>Example B</u> Volkswagen corrected leak test from MY2018, inserted PM standard.
	Can carryover CA PH3 fuel forever. When will EPA use Tier 3 fuel for in-use testing?	<u>Request EPA confirmation of applicable model year.</u>
	<u>Example C</u> Accepted by EPA.	<u>Example C</u> Volkswagen corrected leak test from MY2018, inserted PM standard.
	<u>Example D</u> EPA pointed out the 150K FUL not required until MY2020 or 2021(?)	<u>Example D</u> Volkswagen updated the FUL column.
	Tires are required for evaporative emission tests. They can be aged, within constraints (§1066.810). <u>Section 86.101 Updates</u>	Examples A through D have been updated and attached to the report for EPA review and confirmation. <u>Tier 3 Evap</u> <u>Section 86.101 Updates</u>
	In response to VW question regarding carryover of 2021 to 2022, EPA stated that they would not require testing to 1066 if that is the only reason for a retest.	Volkswagen corrected slide.
	Leak test starts in MY2018	

	In general, EPA agreed with VW carryover request.	Volkswagen developed a timeline for different concepts under Tier 2 and Tier 3 programs, indicating when the appropriate test procedures apply. See attached slides. Volkswagen requests EPA confirmation.
9. Example and approval of DDV test matrix(Gasoline)	<p>Asked EPA about assigned DFs for Tier 3. EPA said that this is low priority and that we should meet with them if we need assigned DFs.</p> <p>LEV III/Tier 3 ADP test schedule with optional test points – EPA accepted.</p> <p>Gasoline DDV Example of Test Procedure – EPA agreed to the proposed test schedule and advised that we use good engineering judgment.</p> <p>EPA accepted use of the FTP DFs for all other tests. Regarding the potential use of optional DFs (Cold CO, US06, SC03), EPA stated that most manufacturers use the FTP DFs for the other cycles. EPA advised that we use good engineering judgment.</p> <p>For DDV and Evap testing, EPA does not require evaporative emission testing of DDVs. EPA accepted the proposal.</p> <p>EPA repeated that evaporative emission durability requires maximum ethanol content available in commercial fuel (currently E15).</p>	<p><u>Other</u></p> <p>Discussion regarding MY2016 VECI labels.</p> <p>VW to provide samples of MY2016 VECI labels for EPA review.</p>

10. Tier 3 Evap Compliance • Calculation and Credit debit trading	<p>EPA observed that by IUVIP, there is nearly no deterioration of evaporative emissions in the field.</p> <p>The calculation procedure with the 1160 threshold value is used when the 20/20 option is applied. The 20/20 option represents 20% Tier 3 evaporative emissions standard and 20% leak detection; MY 2017 only.</p> <p>EPA agreed with the Tier 3 Evap Compliance Calculations as presented.</p>
--	--

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Fri 7/11/2014 10:22:15 AM  
**Subject:** RE: 2015 FE Guide - data in Verify

Thanks Dave. I corrected index # 054 and the carline name 475 to Veneno Roadster (477). This should take care of the duplication. Everything else looks to be good.

RET

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Thursday, July 10, 2014 3:35 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** 2015 FE Guide - data in Verify

Richard

Here's the data just after our macro ran. I haven't had time to clean it up for the Veneno carline name change, etc.

Dave

**To:** Good, David[good.david@epa.gov]  
**Cc:** Schmidt, Oliver (EEO)[Oliver.Schmidt@vw.com]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Mon 7/7/2014 10:34:22 AM  
**Subject:** RE: 2015 FE Guide - Errors in EPA's data base as of July 1, 2014

Hi Dave;

I corrected the typos on label index #097. Should be good to go.

Thanks,

Richard

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Thursday, July 03, 2014 5:04 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Schmidt, Oliver (EEO); Snyder, Jim  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of July 1, 2014

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of July 1, 2014

Attached are the data in Verify as of July 1, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on July 9, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** Good, David[good.david@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Thur 6/26/2014 2:17:22 PM  
**Subject:** RE: 2015 FE Guide - Errors in EPA's data base as of June 23, 2014

Thanks Dave, I corrected the adjusted highway CO2 rounding error for Index #090.

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Thursday, June 26, 2014 9:53 AM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of June 23, 2014

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of June 23, 2014

Attached are the data in Verify as of June 23, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on July 1, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave



**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Mon 6/23/2014 4:54:30 PM  
**Subject:** RE: 2015 FE Guide as of Fri (6/20) attached

Thanks Dave, I corrected the Passat TDI automatic, GHG rating.

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Monday, June 23, 2014 11:14 AM  
**To:** Thomas, Richard (EEO)  
**Subject:** 2015 FE Guide as of Fri (6/20) attached

Richard,

Here's the data as is after running the macro. I didn't have time to clean up the data----e.g. add the Veneno to the Aventador carline name, etc. The macro picked up an error in the Diesel Passat.

Call me if questions.

Dave

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 6/18/2014 3:02:06 PM  
**Subject:** DIS current common applications

Hi Dave;

We have investigated the information on DIS for several manufactures and did not find common sections of the application for certification much newer than 2007 model year. However, we did find 2014 model year information for manufacture's test groups. Is there an explanation that would explain why these common sections have not been updated?

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: Richard.Thomas@VW.com

**To:** Good, David[good.david@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Thur 6/5/2014 4:37:01 PM  
**Subject:** RE: 2015 FE Guide - Errors in EPA's data base as of June 4, 2014

Hi Dave;

I have made a correction to Index #62, to correct the adjusted rounded highway value. It should be good to go now.

Thanks,

Richard

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Thursday, June 05, 2014 11:14 AM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of June 4, 2014

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of June 4, 2014

Attached are the data in Verify as of June 4, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on June 9, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 6/4/2014 10:41:43 AM  
**Subject:** 5-cycle Calculation Method and Flex Fueled Test Groups

Hi Dave;

Is it possible to enter fuel economy testing using two different calculation methods for flexible fueled models? For example; in Verify there are three FE label calculation approaches for gasoline or diesel models, the other choices are related to BEV and PHEV, but this choice is only presented once. When we do a FFV label we have both a gasoline calculation and an E85 calculation per index. It would seem to me that this would not allow the use of a 5-cycle approach for gasoline and a derived 5-cycle approach for E85 within the same index. Is that the intent, or am I missing something?

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: Richard.Thomas@VW.com



**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Tue 6/3/2014 6:18:49 PM  
**Subject:** FW: Fw: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

FYI.....

**From:** Giles, Michael (EEO)  
**Sent:** Tuesday, June 03, 2014 2:17 PM  
**To:** Verify Help Desk  
**Cc:** Harris, Dale (EEO); Allen, Gregory (EEO); Thomas, Richard (EEO); Rodgers, William (EEO)  
**Subject:** RE: Fw: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

Thanks for the fast follow up **Ex. 6**

Can you keep us informed about when the fix might occur if possible.

Thanks

Mike

**From:** **Ex. 6** **On Behalf Of Verify Help Desk**  
**Sent:** Tuesday, June 03, 2014 2:15 PM  
**To:** Giles, Michael (EEO)  
**Cc:** Harris, Dale (EEO); Allen, Gregory (EEO); Thomas, Richard (EEO); Rodgers, William (EEO)  
**Subject:** Re: Fw: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

Hello Mr. Giles,

This issue has been documented in Verify-12883, the fix for which will be deployed in a future release.  
We will discuss this issue with the EPA.

**Ex. 6**

Verify Help Desk

**Ex. 6**

Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

[Ex. 6]

06/03/2014 12:44 PM

To: [Toverifyhelp@](mailto:Toverifyhelp@) [Ex. 6]

cc:

Subject: Fw: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

----- Forwarded by [Ex. 6] USA/CSC on 06/03/2014 12:40 PM -----

From: "Rodgers, William (EEO)" <[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)>

To: [Ex. 6]

Cc: "Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>, "Allen, Gregory (EEO)" <[Gregory.Allen@vw.com](mailto:Gregory.Allen@vw.com)>

Date: 06/02/2014 03:23 PM

Subject: RE: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

---

Hello [Ex. 6],

Transaction Id: 4f47478a-53db-45bd-a48d-fc9460c45612

When you reload the “Report” file from this transaction to the Verify CDX\Test Group screen it re-numbers engine configuration numbers and ignores existing xml tags. This poses a problem when making updates or corrections from previous xml Report files as we do often.

Note - The engine configuration number is used by the fuel economy program and drives the engine descriptions on the EPA fuel economy guide website. When configuration numbers change from what was first input and labelled, it potentially creates erroneous model/engine descriptions online.

Regards,  
Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.  
Engineering and Environmental Office

Auburn Hills, MI  
(248) 754-4219  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**From:** Giles, Michael (EEO)  
**Sent:** Monday, June 02, 2014 1:31 PM  
**To:** Rodgers, William (EEO)  
**Subject:** RE: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

**From:** Ex. 6 **On Behalf Of** Verify Help Desk  
**Sent:** Monday, June 02, 2014 12:37 PM  
**To:** Giles, Michael (EEO)  
**Cc:** Harris, Dale (EEO); Allen, Gregory (EEO); Thomas, Richard (EEO)  
**Subject:** Re: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

Hello Mr. Giles,

Verify help desk ticket HLP-5220 was opened for your inquiry. Will you please send your test group submission file or the transaction id for the test group submission?

Ex. 6

Verify Help Desk  
Ex. 6  
Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Giles, Michael (EEO)"  
[<michael.giles@vw.com>](mailto:michael.giles@vw.com)

06/02/2014 08:49 AM

To: Ex. 6  
"Harris, Dale (EEO)" <[Dale.Harris@vw.com](mailto:Dale.Harris@vw.com)>, "Allen, Gregory (EEO)" <[Gregory.Allen@vw.com](mailto:Gregory.Allen@vw.com)>,  
"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>  
Subject: VW Group - Problem with VERIFY engine configuration re-numbering.

Hello [Ex. 6]

We have found an issue with VERIFY which is causing errors in test group data during load of the XML for updates or corrections.

The issue is that the form quietly removes existing engine configuration values in the Test Group form when loading an XML, and replaces with new numbers matching the input sequence. This small change can cause significant headaches when doing fuel economy labeling which relies on the engine configuration value.

Steps to Reproduce Engine configuration ordering problem which can occur when a correction is made to an engine configuration in a test group data set:

- 1) From VERIFY, request test group report for FVGAV02.0APA and save file.
- 2) Open XML with text editor and note the ordering of the 3 repeating EngineConfigurationDetails:
  - a. First in sequence: **211HP** with EngineConfigurationNumber = **3**
  - b. Second in sequence: **170HP** with EngineConfigurationNumber = **1**
  - c. Third: **220HP** with EngineConfigurationNumber = **2**
  - d. **Note that these elements come out of VERIFY "out of sequence" 3,1,2 ... but since the engconfig# value tags are associated, this should not really be a problem.**
- 3) Re-Open file in VERIFY form. Note that the original configuration numbers have been disposed and that the 3 entries are now re-numbered to match their sequential order, rather than the engine configuration number:
  - a. First in sequence: **211HP** with EngineConfigurationNumber = **1**
  - b. Second in sequence: **170HP** with EngineConfigurationNumber = **2**
  - c. Third: **220HP** with EngineConfigurationNumber = **3**
  - d. **Note that this scrambles the original engineconfiguration number which was associated with each engine.**
  - e. **A save can be done to confirm that the values above are now stored in the XML file.**

Please let us know if you can reproduce this issue. We are hoping that it is possible to correct this soon. Please advise.

Regards,  
Mike

Michael Giles  
Certification Engineer  
Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Phone: 248 754 4229

Fax: 248 754 4207

mailto: [Michael.Giles@VW.com](mailto:Michael.Giles@VW.com)

**To:** Good, David[good.david@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Tue 6/3/2014 6:05:51 PM  
**Subject:** RE: 2015 Audi 2.0L FFV Test Group Fuel Economy Labels

Okay, thanks Dave.

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Tuesday, June 03, 2014 1:54 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** RE: 2015 Audi 2.0L FFV Test Group Fuel Economy Labels

Richard,

I'm in the process of running an updated 2015 FE Guide and sending the data to DOE.

I'll just send to DOE whatever data is in Verify (error free) and releasable. The query will be run in the next few minutes. I'll send it to DOE later today or tomorrow.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Tuesday, June 03, 2014 1:36 PM  
**To:** Good, David  
**Cc:** Snyder, Jim  
**Subject:** 2015 Audi 2.0L FFV Test Group Fuel Economy Labels

Hi Dave;

I just completed five 2015 labels for the carry over 2.0L automatic quattro models, index

numbers 064 through 068, into Verify. These models are on the ship to the US and we expect to have a rolling release of these models once they arrive here next week. Label indexes 064, 065 and 066, are carried over but of course the projected volumes are changed so that the sales weighted unrounded numbers are now slightly different. I would like to be sure that there are no rounding errors for these labels as I expect the values will go on Monroney labels next week.

We also have the 3.0L supercharged V6 gasoline models that will be arriving of the same ships. We just spoke to Jim who said he would put the Audi 3.0L V6 test group FVGAJ03.0AUD on the top of his list for issuance of the certificate. I cannot enter labels into Verify until we have a certificate issued. This test group contains nine model type labels that also have to be completed, with the exception of the Audi SQ5 where we have new data. All the other specific model type labels (eight) are carried over.

I don't know your schedule for the audit of labels, but could you let me know if you prefer to have all these new 2015 labels together or could you look at only the index 064-066 labels now?

If you have time you can give me a call to discuss.

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

<mailto:Richard.Thomas@VW.com>

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Tue 6/3/2014 10:13:33 AM  
**Subject:** FW: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

Hi Dave;

As I noted in yesterday's email we are working with the help desk to see why Verify renumbered the engine configurations causing the engine displacement error on the fuel economy guide web site. I did go ahead and corrected four labels for the 2015 Audi A3 models so that the A3 front is 1.8L while the A3 quattro models are 2.0L.

Thanks,

Richard

**From:** Rodgers, William (EEO)  
**Sent:** Monday, June 02, 2014 3:23 PM  
**To:** EX-4-CBI@csc.com'  
**Cc:** Giles, Michael (EEO); Allen, Gregory (EEO)  
**Subject:** RE: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

Hello EX-4 - CBI

Transaction Id: 4f47478a-53db-45bd-a48d-fc9460c45612

When you reload the "Report" file from this transaction to the Verify CDX\Test Group screen it re-numbers engine configuration numbers and ignores existing xml tags. This poses a problem when making updates or corrections from previous xml Report files as we do often.

Note - The engine configuration number is used by the fuel economy program and drives the engine descriptions on the EPA fuel economy guide website. When configuration numbers change from what was first input and labelled, it potentially creates erroneous model/engine descriptions online.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**From:** Giles, Michael (EEO)  
**Sent:** Monday, June 02, 2014 1:31 PM  
**To:** Rodgers, William (EEO)  
**Subject:** RE: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

**From:** Ex. 4 - CBI Dcsc.com On Behalf Of Verify Help Desk  
**Sent:** Monday, June 02, 2014 12:37 PM  
**To:** Giles, Michael (EEO)  
**Cc:** Harris, Dale (EEO); Allen, Gregory (EEO); Thomas, Richard (EEO)  
**Subject:** Re: VW Group - Problem with VERIFY engine configuration re-numbering (HLP-5220)

Hello Mr. Giles,

Verify help desk ticket HLP-5220 was opened for your inquiry. Will you please send your test group submission file or the transaction id for the test group submission?

Ex. 4 - CBI

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>

To: Verify Help Desk@CSC  
cc: "Harris, Dale (EEO)" <[Dale.Harris@vw.com](mailto:Dale.Harris@vw.com)>, "Allen, Gregory (EEO)"  
<[Gregory.Allen@vw.com](mailto:Gregory.Allen@vw.com)>, "Thomas, Richard (EEO)"  
<[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>  
Subject: VW Group - Problem with VERIFY engine configuration re-numbering.

06/02/2014 08:49 AM

Hello [REDACTED]  
[REDACTED] Ex. 4 - CBI,

We have found an issue with VERIFY which is causing errors in test group data during load of the XML for updates or corrections.

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- 3) Re-Open file in VERIFY form. Note that the original configuration numbers have been disposed and that the 3 entries are now re-numbered to match their sequential order, rather than the engine configuration number:
  - a. First in sequence: **211HP with EngineConfigurationNumber = 1**

- b. Second in sequence: **170HP** with EngineConfigurationNumber =2
- c. Third: **220HP** with EngineConfigurationNumber = 3
- d. **Note that this scrambles the original engineconfiguration number which was associated with each engine.**
- e. **A save can be done to confirm that the values above are now stored in the XML file.**

Please let us know if you can reproduce this issue. We are hoping that it is possible to correct this soon.  
Please advise.

Regards,  
Mike

Michael Giles  
Certification Engineer  
Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Phone: 248 754 4229  
Fax: 248 754 4207  
mailto: [Michael.Giles@VW.com](mailto:Michael.Giles@VW.com)

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Mon 6/2/2014 12:52:45 PM  
**Subject:** RE: [Fueleconomy] Mistake on fuleeconomy.gov website - 2015 Audi A3 models removed.txt

Hi Dave;

We have investigated your question and the error that now appears on the fuel economy dot gov web site. The A3 1.8L (front wheel drive) was originally correct as was the 2.0L A3 quattro (all-wheel drive). The problem occurred when we made a running change to add the Golf model to this dual displacement (1.8L & 2.0L) test group and they reprocessed the CSI in Verify. Verify scrambled the original engine configuration numbering and we will contact the Verify help desk to look into the reason why Verify does that.

I can rerun the labels, but before I do that I want to resolve this Verify issue since I have other dual displacement test groups and models still to be labeled.

Thanks,

Richard

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Friday, May 30, 2014 9:23 AM  
**To:** Thomas, Richard (EEO)  
**Subject:** FW: [Fueleconomy] Mistake on fuleeconomy.gov website - 2015 Audi A3 models

Richard,

Please let me know what you think about this customer's email.

If he is correct, please revise Verify when you get a chance.

Thanks

Dave

**From:** FuelEconomy [mailto:[fueleconomy@ornl.gov](mailto:fueleconomy@ornl.gov)]  
**Sent:** Thursday, May 29, 2014 4:34 PM  
**To:** Good, David  
**Subject:** FW: [Fueleconomy] Mistake on fuleconomy.gov website

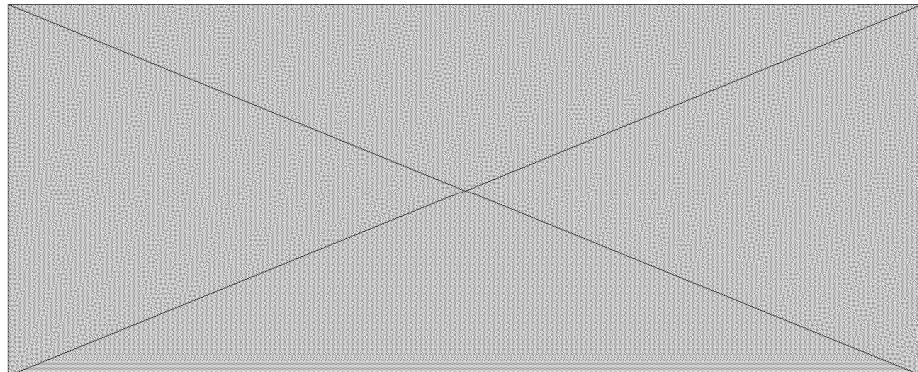
Hi Dave,

Mr. **Ex. 6** is referring to the 2015 Audi A3 models on our website:

<http://www.fueleconomy.gov/feg/Find.do?action=sbs&id=34710&id=34771>

The information on the official Audi website would suggest that the 2.0 L engine should be associated with the A3 Quattro while the 1.8 L engine is associated with the standard A3:

<http://www.audiusa.com/models/audi-a3-sedan>



Could you please let us know if a correction is needed? We appreciate the help.

Bob Boundy

Roltek, Inc., Supporting:

Oak Ridge National Laboratory

[www.fueleconomy.gov](http://www.fueleconomy.gov)

Email: [boundyrg@ornl.gov](mailto:boundyrg@ornl.gov)

Phone: (856) 850-0766

**From:** [REDACTED] Ex. 6 [REDACTED]@yahoo.com]  
**Sent:** Thursday, May 29, 2014 2:47 PM  
**To:** FuelEconomy  
**Subject:** [Fueleconomy] Mistake on fuleeconomy.gov website

To whom it may concern:

The Audi A3 Quattro comes with the 2.0 L turbocharged engine and all-wheel drive. While the standard Audi A3 comes with the 1.8 L turbocharged engine and front-wheel drive. Here is a link to the mistake:

<http://www.fueleconomy.gov/feg/Find.do?action=sbs&id=34771&id=34710> and here is a link to the Audi website: <http://www.audiusa.com/models/audi-a3-sedan> stating that the "...1.8-liter TFSI® turbocharged engine comes standard, while an available 220-horsepower, 2.0-liter TSFI® engine with quattro® all-wheel drive..."

With Regards,

**Ex. 6**

**To:** Good, David[good.david@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Fri 5/30/2014 10:49:28 AM  
**Subject:** RE: 2015 FE Guide - Errors in EPA's data base as of May 28, 2014

Thanks Dave. The errors were corrected in Verify today and should be good now.

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Thursday, May 29, 2014 5:42 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of May 28, 2014

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of May 28, 2014

Attached are the data in Verify as of May 28, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on June 1, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave



**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Mon 5/19/2014 1:46:47 PM  
**Subject:** RE: BEV and the Guide

Thank you Dave, this will help.

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Friday, May 16, 2014 3:26 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: BEV and the Guide

Richard,

Attached are some EV templates for calculating FE Label values, entering CD data into Verify, etc.

For CAFE calcs, I think Bob Peavyhouse uses the CD range and the recharge energy to determine the CAFE energy consumption---e.g. values from the city & hwy EV test data which manufacturers enter into Verify (my example data).

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Friday, May 09, 2014 9:18 AM  
**To:** Good, David  
**Subject:** BEV and the Guide

Hi Dave;

When you are back in the office on Monday or Tuesday, can we talk about BEV and the

information needed for Verify and the fuel economy labeling program? This is our first BEV and I am not up to speed on data needed for the program. Please give me a call when you can discuss.

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** richard.thomas@vw.com[richard.thomas@vw.com]; kachuen.wong@bmwna.com[kachuen.wong@bmwna.com]; thomas.hofmann@bmwna.com[thomas.hofmann@bmwna.com]; asw9@chrysler.com[asw9@chrysler.com]; j.foor@chrysler.com[j.foor@chrysler.com]; Dave Barker[dba1@subaru.com]; elarue1@ford.com[esarue1@ford.com]; jcusuman@ford.com[jcusuman@ford.com]; deborah.a.zielesch@gm.com[deborah.a.zielesch@gm.com]; laura.l.parker@gm.com[laura.l.parker@gm.com]; Bill Beggs[william.beggs@gm.com]; Darin\_Johnson@AHM.Honda.com[Darin\_Johnson@AHM.Honda.com]; peter\_meier@ahm.honda.com[peter\_meier@ahm.honda.com]; Tony D'Ambrosi[adambrosi@hatci.com]; Christine Ueno[cueno@hatci.com]; rseal3@jaguar.com[rseal3@jaguar.com]; vvarjabe@jaguar.com[vvarjabe@jaguar.com]; vvarjabe@jaguarlandrover.com[vvarjabe@jaguarlandrover.com]; kareen.toussagnon@daimler.com[kareen.toussagnon@daimler.com]; markus.loesch@daimler.com[markus.loesch@daimler.com]; roland.mulde@daimler.com[roland.mulde@daimler.com]; john.gantchar@na.mitsubishi-motors.com[john.gantchar@na.mitsubishi-motors.com]; david.patterson@na.mitsubishi-motors.com[david.patterson@na.mitsubishi-motors.com]; KhanF@NRD.NISSAN-USA.COM[KhanF@NRD.NISSAN-USA.COM]; ross.gatzke@porsche.us[ross.gatzke@porsche.us]; drobertson@mazdausa.com[drobertson@mazdausa.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; kiriri@nano.tec.toyota.co.jp[kiriri@nano.tec.toyota.co.jp]; Masahiro Konno[masahiro.konno@tema.toyota.com]; gbuffali@volvocars.com[gbuffali@volvocars.com]; plennvi@volvocars.com[plennvi@volvocars.com]; snagaraj@teslamotors.com[snagaraj@teslamotors.com]; oliver.schmidt@vw.com[oliver.schmidt@vw.com]; james@teslamotors.com[james@teslamotors.com]; Jackey Chen[jackey.chen@byd.com]; Scott Hu[scott.hu@byd.com]; Ott, William[ott.william@epa.gov]; Pidgeon, Bill[pidgeon.bill@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Ball, Joel[ball.joel@epa.gov]; Dalton, Joel[Dalton.Joel@epa.gov]; Anderson, Tom[Anderson.Tom@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Wehrly, Linc[wehrly.linc@epa.gov]

**From:** Good, David  
**Sent:** Mon 8/18/2014 7:06:03 PM  
**Subject:** Re: 2015 Printed FE Guide - Please email me your placeholder information for any HEVs, PHEVs, EVs, alt fuel & diesel vehicles which won't have FE Labels in Verify by Aug 27, 2014  
Generic-Placeholder\_Info\_EV-PHEV-etc-(dgood) for Printed Guide.xlsx  
CD-14-15-FE 2015 Label Guidance.pdf

To manufacturers FE Label contacts,

When you get a chance, please send me an excel spreadsheet with any placeholders for the 2015 Printed FE Guide for vehicles which will be labeled AFTER Aug 27, 2014 (and won't have FE Label data in Verify by that time).

I need any placeholders for any conventional hybrids, EVs, PHEVs, fuel cell vehicles, diesels, FFVs, CNG vehicles and alt fuel vehicles. Attached is a generic Excel spreadsheet which you can use to email your placeholder information to me.

[I don't need placeholder information for vehicles which already have 2015 FE Label information entered in Verify.]

I need your placeholders as soon as possible, no later than Tuesday, Aug 26, 2014 COB.

Note: I'll send a separate email message to each individual manufacturer with the data in Verify as of Aug 15,2014 for your review. The last page of the attached EPA guidance letter outlines the timeline for the 2015 Printed FE Guide. [Labor Day is approaching fast.]

Thanks

Dave



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY  
2565 PLYMOUTH ROAD  
ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF  
AIR AND RADIATION

August 12, 2014

CD-14-15 (LDV/LDT/ICI/LIMO)

**SUBJECT: Fuel Economy Label Information for 2015 Model Year**

Dear Manufacturer:

This information in this letter supplements the information provided in EPA guidance letter CD-13-14 issued on November 22, 2013. Enclosed with this letter is information designed to guide you in your 2015 model year fuel economy labeling program.

Enclosure 1

"Fuel Economy Supplementary Information for 2015 Model Year" contains information about the printed Fuel Economy Guide and about posting 2015 fuel economy data on the EPA/DOE website ([www.fueleconomy.gov](http://www.fueleconomy.gov)).

Enclosure 2

Enclosure 2 provides instructions for submitting information to EPA for the Fuel Economy Guide for alternative-fueled vehicles, CNG vehicles, electric vehicles, plug-in hybrid vehicles, and sport utility vehicles.

Enclosure 3

Enclosure 3 contains the timetable for inclusion of fuel economy label values in the 2015 model year printed Fuel Economy Guide.

If you have any questions about these instructions, please contact your certification team representative.

Sincerely,

Byron J. Bunker, Director  
Compliance Division  
Office of Transportation and Air Quality

Enclosures

cc: Dennis Smith, DOE

**ENCLOSURE 1  
to CD-14-15**

**Fuel Economy Supplementary Information  
for the 2015 Model Year**

**Annual Fuel Cost Estimates**

Annual fuel cost estimates for 2015 model year fuel economy labels (window stickers of new vehicles) were provided in EPA guidance letter CD-13-14, November 22, 2013.

**Fuel Economy Ranges to be placed on FE Labels**

Fuel economy ranges to be used on 2015 model year fuel economy labels were provided in EPA guidance letter CD-13-14, November 22, 2013.

**Fuel Economy Data to be Included in the Printed Fuel Economy Guide**

EPA and DOE will publish the printed copy of the Fuel Economy Guide once per year, normally in November. The printed Guide will be distributed to automobile dealerships, libraries, credit unions, etc. and published as a PDF file on the web site [www.fueleconomy.gov](http://www.fueleconomy.gov).

Unless otherwise instructed, EPA will forward to DOE all 2015 MY fuel economy label values in the EPA database on the date indicated in Enclosure 3. DOE is then responsible for printing and distributing the Fuel Economy Guide. If a manufacturer wishes to exclude a model type from the printed Guide, a request providing justification for the exclusion must be submitted in writing to EPA for approval.

**Release Date**

The manufacturer-specified "release date" in the VERIFY database should correspond to the date that the vehicle will be introduced into commerce. EPA will use this date to determine when fuel economy information for a model type should be released to the public and listed at [www.fueleconomy.gov](http://www.fueleconomy.gov).

**EPA/DOE Fuel Economy Web Site ([www.fueleconomy.gov](http://www.fueleconomy.gov))**

The EPA and the Department of Energy (DOE) maintain a website devoted to fuel economy and related information: [www.fueleconomy.gov](http://www.fueleconomy.gov). The web site contains the 2015 MY fuel economy label information in the EPA database (as the data becomes available throughout the model year), plus tips and general information about the fuel economy of passenger cars and light trucks. The website is normally updated four times a month (normally on the 1st, 9th, 15th and 23rd of the month). As mentioned above, EPA will use the manufacturer-provided Release Date to determine which data are available to post on the website. If you need a 2015 fuel economy label posted on [www.fueleconomy.gov](http://www.fueleconomy.gov) on a specific date and time (e.g. to coincide with a manufacturer's press release), please contact Dave Good of my staff at (734) 214-4450 or [good.david@epa.gov](mailto:good.david@epa.gov).

EPA encourages automobile manufacturers (and dealers) to link their web sites to the EPA/DOE site, as a public reference for fuel economy of passenger cars and light-duty trucks.

### **Displaying “fueleconomy.gov” on FE Labels (Window Stickers)**

As a reminder, EPA labeling regulations require the EPA/DOE website address to be listed on your fuel economy labels, ref. 40 CFR 600.302-12(b)(5).

### **Gas Guzzler Tax**

If, according to your calculations, one or more of your model types are subject to the Gas Guzzler Tax, those model types are noted by the letter "G" in the engine description section of the Fuel Economy Guide.

The total amount of tax is determined by the Internal Revenue Service (IRS). The manufacturer is responsible to the IRS for reporting and paying the Gas Guzzler Tax. The amount of the Gas Guzzler tax is required to be shown on the label, as determined from the tax schedule shown in 40 CFR 600.513-08, unless the manufacturer has been granted an alternative tax rate schedule. However, the IRS may audit your records and make its own determination about your tax liability. If the IRS determines a different tax rate after the model year, you will not be required to re-label unsold vehicles.

### **Limousine Manufacturers**

Under the Revenue Consolidation Act of 1991, limousine manufacturers or modifiers are subject to the Gas Guzzler requirements. Manufacturers or modifiers of such vehicles should obtain fuel economy labels for their vehicles and conversions and pay the appropriate tax to the IRS.

**ENCLOSURE 2  
to CD-14-15**

**Supplementary Instructions for Submitting Fuel Economy  
Information to EPA for the 2015 Fuel Economy Guide**

**1. Background Information**

For the 2015 Fuel Economy Guide, EPA will list all gasoline, diesel and alternative fuel vehicles together. This will help consumers find alternative fuel vehicles and compare their fuel economy with gasoline vehicles more conveniently through "one stop shopping."

The 2015 Guide will also separately list the following advanced technology and alternative-fueled vehicles:

Hybrid-Electric Vehicles (HEVs)  
Plug-in Hybrid-Electric Vehicles (PHEVs)  
Hydrogen Fuel Cell Vehicles (FCVs)  
Electric Vehicles (EVs)  
Diesel Fueled Vehicles  
Ethanol (E85) Flexible-Fueled Vehicles  
Compressed Natural Gas (CNG) Vehicles  
Liquefied Petroleum Gas (LPG) Vehicles

For dual-fueled vehicles, the gasoline mpg values for the vehicle will be listed in both the Gasoline section of the Guide and the appropriate alternative-fuel section of the Guide.

**2. Listing New Technology and Alternative-Fueled Vehicles**

Manufacturers should provide the information as specified in the FE Label module of EPA's Verify database for new technology and alternative-fueled vehicles.

For **flexible fueled and dual-fueled vehicles**, manufacturers should enter the data into the EPA Verify database for both fuels in the same model type index by clicking on the buttons to "Add Another Fuel Usage" and "Add Another Base Level Fuel Usage." For example, enter the gasoline test data in "Base Level Fuel Usage #1" and the E85 test data in "Base Level Fuel Usage #2." Please do not enter the gasoline and alternative fuel data using two separate index numbers.

For **compressed natural gas (CNG) vehicles**, manufacturers should provide the city, highway and combined fuel economy values in miles per gallon-equivalent, where one gallon-equivalent is equal to 121.5 standard cubic feet of CNG; ref. the "gasoline gallon equivalent" definition provided in 40 CFR 600.002.

For **electric vehicles and plug-in hybrid vehicles**, manufacturers should provide the city, highway and combined fuel economy/energy consumption values when operating on electricity in units of miles per gallon-equivalent and also kW-hr/100 miles, where one gallon of gasoline is equivalent to 33.705 kilowatt-hours of electricity; ref. the "gasoline gallon equivalent" definition provided in 40 CFR 600.002. In addition, please enter in the model type comments field (GL-4) the adjusted rounded driving range (miles) when operating on electricity for city (FTP) and

highway operation. For PHEVs, please enter in the model type comments field the multi-day individual utility factors for city, highway and combined (55% city/45%highway) operation.

When entering charge depleting data in the Test Information module of Verify, please enter MFR FE in units of miles per gallon (not in units of kW-hr/100 miles). If this is your first time entering EV and PHEV charge depleting data into EPA's Verify database, please email Dave Good ([good.david@epa.gov](mailto:good.david@epa.gov)) for an example template showing our preferred method of entering charge depleting test data into EPA's data base.

### **3. Placeholders for New Technology and Alternative-Fueled Vehicles Which will be Available Later in the 2015 Model Year**

If the city and highway fuel economy values and driving ranges will not be available by August 27, 2014, manufacturers should submit the information in the tables below with the fuel economy and driving ranges listed as "NA" (not available). Please include the manufacturer/division name, carline name, transmission type, engine displacement in liters, engine number of cylinders, vehicle class, interior volume for 2-door, 4-door, hatchback models, and the cargo volume (if applicable). Please don't send placeholder information for vehicles which are already in EPA's Verify database. The information should be emailed to Dave Good at [good.david@epa.gov](mailto:good.david@epa.gov) on or before the date listed in Enclosure 3.

To provide placeholder information for **fuel cell vehicles**, manufacturers should provide an Excel file with the following information, plus a short explanation of the availability of the vehicles, as follows:

Model Name	Veh. Class, Body type, Pass/Cargo Volume	Trans Type	Type of Fuel Cell	Motor Type & Power	Energy Storage Device and Rating	Fuel Type	Miles Per Kilogram		Driving Range (miles)
							City	Hwy	
AB	Compact 2dr – 91/12	Auto (A1)	PEM	100 kW-AC Induction	144 Volt Nickel Metal Hydride	Hydrogen	NA	NA	NA
CD	SUV	Auto CVT	PEM	100 kW-DC Brushless	244 Volt Lithium Ion	Hydrogen	NA	NA	NA

Availability:

AB Fuel Cell vehicles are initially available in California and Arizona only.

CD Fuel Cell vehicles will be available nationwide (for lease only) in the late fall of 2014.

Additional information may also be included if necessary to describe your vehicles.

To provide placeholder information for **electric vehicles**, manufacturers should provide an Excel file plus a short explanation of the availability of the vehicles, as follows:

Carline Name	Veh. Class, Body Type, Pass/Cargo Volume	Type of Battery	Trans Type	Motor Size Type	Energy Consumption (KW-hr/100mi)		Driving Range (miles)
					City	Hwy	
AB Electric	Large Cars 4dr-113/13	Lead-Acid	Auto (A1)	95 KW AC Induction	NA	NA	NA
AB Electric	Large Cars 4dr-113/13	Nickel-Metal Hydride	Auto (A2)	45 KW AC Induction	NA	NA	NA
CD Electric	Subcompact 2 dr-85/11	Lithium-Ion	Auto CVT	62 KW DC	NA	NA	NA

Availability:

AB Electric vehicles are initially available to the U.S. Postal Service in California and Arizona only.

CD Electric vehicles will be available nationwide (initially for lease only) in the late fall of 2014.

Additional information may also be included if necessary to describe your vehicles.

To provide placeholder information for **other alternative fueled vehicles**, manufacturers should provide an Excel file with the following information:

Model Name	Vehicle Class, Body Type Pass/Cargo	Trans Type	No. of cyl.	Engine	Fuel Type	Miles Per Gallon		Driving Range (miles)
						City	Hwy	
AA	Compact 4dr - 95/11	Auto(A5)	4	1.8L	Dedicated CNG	NA	NA	NA
BB	SUV-4WD	Auto(A4)	8	5.3L	E85	NA	NA	NA
					Gasoline	NA	NA	NA

To provide placeholder information for **plug-in hybrid electric vehicles (PHEVs)**, manufacturers should provide an Excel file with the information from both the electric vehicle table above and the “other alternative fueled vehicle” table above.

#### **4. Listing Driving Ranges for Alternative-Fueled Vehicles**

The calculation of the EPA driving range should be based on the adjusted combined fuel economy label value (rounded to the nearest whole mpg value) as determined in 40 CFR 600.210-08(c), (d), and (e), as applicable, and the useable fuel tank capacity of the vehicle (rounded to the nearest tenth of a gallon). Manufacturers should enter the driving range(s), rounded to the nearest mile, in the model type driving range field in the Fuel Economy Label module of EPA’s Verify data base.

If several fuel tank capacities are available for a vehicle, a manufacturer should enter the driving range, rounded to the nearest mile, for the smallest and largest fuel tank available for the vehicle. Manufacturers should enter this information in the “model type driving range” field in the Fuel Economy Label module of EPA’s Verify database. For example, manufacturers should enter ‘nnn’ for a single driving range or ‘nnn/nnn’ for model types which are available with multiple fuel tank capacities.

For dual-fueled vehicles, manufacturers should provide the driving range of the vehicle when operated on gasoline or diesel fuel, and the driving range when operated on any alternative fuel.

For **ethanol vehicles**, manufacturers should determine the vehicle's driving range rounded to the nearest mile by multiplying the adjusted combined fuel economy label value (rounded to the nearest whole mpg) by the vehicle's useable fuel storage capacity (rounded to the nearest tenth of a gallon); ref. 40 CFR 600.311-12(j)(1).

For **CNG vehicles**, manufacturers should determine the vehicle's driving range rounded to the nearest mile by multiplying the adjusted combined fuel economy label value (rounded to the nearest whole mpg equivalent) by the vehicle's useable fuel storage capacity (rounded to the nearest tenth of a gasoline gallon equivalent); ref. 40 CFR 600.311 -12(j)(3). The CNG fuel tank capacity used to calculate the EPA driving range should be based on 80 percent of the nominal fuel tank capacity (using a slow fill rate) in order to account for the reduced fuel tank capacity, which results from a fast fill rate.

For **electric vehicles**, manufacturers should determine the adjusted city and highway driving range as outlined in Section 8 of SAE J1634, Electric Vehicle Energy Consumption and Range Test Procedure, as published October 2002,<sup>1</sup> ref. 40 CFR 600.311-12(j)(2). Manufacturers should determine the combined driving range (rounded to the nearest mile) by arithmetically averaging the adjusted city and highway driving ranges, weighted 0.55 (city) and 0.45 (highway). The driving ranges shall be adjusted to reflect actual in-use driving conditions using one of the methods described in 40 CFR 600.210-12(d)(3).

For **plug-in hybrid vehicles when operating on electricity**, manufacturers should determine the adjusted city, highway and combined driving range (rounded to the nearest mile) as outlined in the provisions of 40 CFR 600.311-12(j)(4). For example, manufacturers should determine the adjusted city and highway charge-depleting driving range values (rounded to the nearest mile) as outlined in SAE J1711, Recommended Practice for Measuring the Exhaust Emissions and Fuel Economy of Hybrid-Electric Vehicles, Including Plug-In Hybrid Vehicles, June 2010. Manufacturers should determine the combined driving range by arithmetically averaging the adjusted city and highway driving ranges, weighted 0.55 (city) and 0.45 (highway). The driving ranges shall be adjusted to reflect actual in-use driving conditions.

For **hydrogen fuel cell vehicles**, manufacturers should determine the vehicle's adjusted driving range rounded to the nearest mile by multiplying the adjusted combined fuel economy label value (rounded to the nearest whole miles per kilogram) by the vehicle's useable fuel storage capacity (rounded to the nearest hundredth of a kilogram); ref. 40 CFR 600.311-12(j)(5). The driving range shall be adjusted to reflect actual in-use driving conditions.

## **5. Battery Charge Time for Electric Vehicles and Plug-in Hybrid Vehicles**

For **electric and plug-in hybrid vehicles**, manufacturers should determine the time it takes to charge a fully depleted battery using a 120 and 240 volt power source as outlined in the provisions of 40 CFR 600.311-12(k). For example, manufacturers should charge the battery to the point that the battery meets the manufacturer's end-of-charge criteria, consistent with the

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<sup>1</sup> With prior EPA approval, manufacturers may use SAE J1634, revised October, 2012, to determine the combined driving range.

procedures specified in SAE J1634 for electric vehicles and in SAE J1711 for plug-in hybrid electric vehicles.

## **6. Comparable Classes**

**2WD SUV Classification:** When labeling 2-wheel drive SUVs, please continue to use the same vehicle classification category as in past model years (even though 2-wheel drive SUVs equal to or less than 6000 lbs GVWR will be included in 2015 passenger car CAFEs). For fuel economy labeling purposes, EPA will require 2015 and later model year 2WD SUVs to continue to be included in the 2WD SUV comparable class based on the provisions of 40 CFR 600.315-08(a)(1) and 600.315-08(a)(2).

**Special Purpose Vehicle Classification:** The “Special Purpose Vehicle” class is to be used when a vehicle does not fit into the definition of any comparable class, ref. 40 CFR 600.315-08(a)(3)(i). This situation is expected to be rare, but may occasionally happen for some types of transit vans, camper vans, limousines, dune buggies, amphibious vehicles, or other special vehicles. In addition, if a vehicle has features that could apply to more than one comparable class, EPA will determine which class is more appropriate, ref. 40 CFR 600.315-08(a)(3)(ii).

**7. Engine /Model Type Descriptors:** Engine and model type descriptors are only needed to identify two otherwise identical model types (so that the customer can easily identify the model). Please enter any needed basic engine/model type descriptors in the Verify FE Label module "Model Type Descriptor" field (field GL-78.2). The engine/model type description should be clear and concise (30 characters or less). For example, a manufacturer could enter “4-valve” in the model type descriptor field to distinguish between otherwise identical 2-valve models. The use of an engine/model type descriptor is subject to EPA approval. Please leave this field blank, or enter N/A in this field unless needed to identify two (or more) otherwise identical model types.

**8. Relabeling:** When relabeling vehicles for reasons specified 40 CFR 600.507-12(a) and 600.314-08(e)(4), please revise the original Index with the revised FE label information and also revise the release date to the effective date when the FE Label was revised. Please include in the model type comment field the reason for relabeling. Note that the provisions of 40 CFR 600.314-08 require that label values must not change for entire model year, except for the reasons outlined in the provisions of 600.507-12(a) and 600.314-08(e)(4).

**9. Adjusted Combined Fuel Consumption (gallons/100 miles):** Please enter the Manufacturer-Calculated Adjusted Combined Model Type Fuel Consumption (GL-214) in units of U.S. gallons per 100 miles, calculated according to the provisions of 600.311-12(c) as revised in the 2017 greenhouse gas final rule (page 77 FR 62624, October 15, 2012). For example, fuel consumption should be based on the rounded adjusted combined MPG label value (not the unrounded adjusted combined MPG value), calculated as follows:

Adjusted Combined Model Type Fuel Consumption = (100/rounded adjusted combined MPG label value). Please use the voluntarily lowered MPG label value, if applicable.

**10. Voluntarily Lowering MPG Values and Increasing CO<sub>2</sub> Values:** As outlined in the provisions of 40 CFR 600.210-12(a), “Manufacturers may voluntarily lower fuel economy

values and raise CO<sub>2</sub> values if they determine that the label values from any method are not representative of the fuel economy or CO<sub>2</sub> emissions for that model type.” We encourage manufacturers to use these provisions as necessary, so that potential customers will be provided with accurate and representative fuel economy and CO<sub>2</sub> information for each vehicle.

**10.1 Calculating Voluntarily Increased CO<sub>2</sub> Values:** If manufacturers voluntarily lower city, highway or combined mpg values, then the provisions of 40 CFR 600.210-12(a) require that CO<sub>2</sub> values be increased accordingly. EPA calculates voluntarily increased city, highway and combined CO<sub>2</sub> values based on 1) the unrounded adjusted mpg value, 2) the unrounded adjusted CO<sub>2</sub> value, and 3) the rounded, voluntarily lowered mpg value, as outlined in the following example:

Given:

unrounded adjusted combined mpg = 21.6949 mpg  
unrounded adjusted combined CO<sub>2</sub> = 408.4 grams/mile  
voluntarily lowered combined Label mpg = 20 mpg

Then: Voluntarily increased combined CO<sub>2</sub> = (21.6949 mpg x 408.4 gpm) / 20 mpg = 443.01 gpm; which rounds to 443 grams/mile CO<sub>2</sub>.

Similar calculations are used to calculate voluntarily increased city and highway CO<sub>2</sub> values.

Note that in some cases, the adjusted combined CO<sub>2</sub> values may need to be increased even though the adjusted combined mpg value is not lowered, e.g. when a city mpg or highway mpg value is voluntarily lowered which (due to rounding) doesn't result in the adjusted combined mpg being lowered.

**ENCLOSURE 3**  
**to CD-14-15**

**Timetable for 2015 MY Printed Fuel Economy Guide**

<b>Task</b>	<b>Significant Dates</b>	<b>Responsible Party</b>
1. Obtain an EPA Certificate which covers all model types to be included in the <u>Guide</u> .	August 14, 2014	Manufacturer
2. Enter general label fuel economy values and any other related information required by the <u>Guide</u> into EPA Verify database for all model types to be included in the <u>Guide</u> .	August 14, 2014	Manufacturer
3. Provide EPA “placeholder” descriptions (as outlined in Enclosure 2) for alternative fuel vehicles which will not be available until later in the model year.	August 14, 2014	Manufacturer
4. Compile a list from Verify with all necessary information for model types to be included in the <u>Guide</u> for each manufacturer; send the list to an individual manufacturer for data accuracy review.	August 15, 2014	EPA
5. Complete review of all information provided in “4” above, make necessary corrections in the Verify database and notify EPA that the data in Verify is complete and accurate.	August 27, 2014	Manufacturer
6. Send the complete <u>Guide</u> information to DOE for printing.	August 28, 2014	EPA
7. EPA announces 2015 Guide via a Press Release	early October, 2014	EPA

**Comparable Class Fuel Economy Ranges**

<b>Task</b>	<b>Significant Dates</b>	<b>Responsible Party</b>
1. Release the comparable class fuel economy ranges to be used on fuel economy labels to the manufacturers.	Previously provided in CD-13-14; will be updated in a November, 2014 guidance letter	EPA

EPA intends to include in the printed Guide, all available information which is submitted to EPA prior to August 28, 2014. August 27, 2014 is the last day for manufacturers to make changes to the EPA computer database.

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Fri 8/8/2014 9:28:05 PM  
**Subject:** RE: re: 2015 FE Guide - Errors in EPA's data base as of August 1, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-8-8-2014.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of August 8, 2014

Attached are the data in Verify as of August 8, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on Aug 15, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

**To:** [REDACTED] Ex. 7 [REDACTED]@vw.com]  
**Cc:** [REDACTED] Ex. 7 [REDACTED]@vw.com]  
**From:** Good, David  
**Sent:** Mon 8/4/2014 10:38:15 PM  
**Subject:** RE: 2015 Audi RS7 Relabeled

[REDACTED] Ex. 7 [REDACTED]

As we discussed last week, I agree with your plan not to provide notification (or send the customer a revised FE Label) to the 17 Audi RS7 customers for which vehicles were already delivered.

Sometimes (depending on the circumstances), our management will insist that manufacturers send a corrected FE Label to the customer. However, for these vehicles this approach is not needed.

Dave

**From:** [REDACTED] Ex. 7 [REDACTED]@vw.com]  
**Sent:** Wednesday, July 30, 2014 9:22 AM  
**To:** Good, David  
**Cc:** [REDACTED] Ex. 7 [REDACTED]  
**Subject:** 2015 Audi RS7 Relabeled

Hi Dave;

Thanks for the discussion this morning. Because we were unable to determine a predominate mode of use for the driver selectable transmission modes, we have relabeled the 2015 Audi RS7 equipped with the 560 HP twin turbo 4.0L V8 engine. These relabeled lower label fuel economy values are derived from test results in the "S" transmission mode and then averaged together with the "D" mode at the required 50/50 weighting. The new lower label values are in production now and dealers holding 2015 Audi RS7 models will get replacement labels. This model has no gas guzzler tax required after this relabeling.

There were 17 units already sold and we do not plan to make any notification to these retail customers announcing any new values and see no regulatory obligation to do so, although we understand that any notification to owners would be optional. Please respond to this mail with your concurrence regarding notification to these 2015 Audi RS7 owners.

Best regards,

[Ex. 7]

## Ex. 7

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone:

Fax:

mailto:[Ex. 7]

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Mon 8/4/2014 10:28:12 PM  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of August 1, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-8-1-2014.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of August 1, 2014

Attached are the data in Verify as of August 1, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on Aug 9, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

**To:** [REDACTED] Ex. 7 [REDACTED]@vw.com]  
**Cc:** [REDACTED] Ex. 7 [REDACTED]@vw.com]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Fri 8/1/2014 9:51:50 PM  
**Subject:** 2013 VW Group CAFE/GHG Report

[REDACTED] Ex. 7 [REDACTED]

I looked in Verify for your 2013 CAFE GHG reports and found two letters dated 3/17/2014--- one for cars and one for trucks. The letters have some calculation information (but don't use the EPA templates like the 2012 VW CAFE/GHG report did) and don't mention anything about AC credits, provide the SAE J2727 A/C leakage worksheets, off cycle credits, CH4 & N2O debits, etc.

The letters are also missing the summary pages of GHG fleet average credits/debits, A/C credits, total credits for the 2013 model year. Most manufacturers also include an AB&T page (like the EPA GHG template) which tallies up the credits/debits for the 2009-2013 model years.

Both of the 3/17/2017 letters indicate that "Volkswagen intends to provide additional information required by 86.1865-12 by May 1, 2014."

Please email me a copy of the "additional information" letters for cars and trucks and enter a pdf copy of them in Verify's document module when you get a chance.

Thanks

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Fri 7/25/2014 11:47:20 PM  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of July 23, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-7-23-2014.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of July 23, 2014

Attached are the data in Verify as of July 23, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

Note: The macro hadn't been double checking your 5 year fuel costs previously. I corrected the macro today. It did pick up a few errors, but most manufacturers had calculated the 5-year "You Save" or "You Spend" values correctly. Call me or email me if you need to discuss it a little. DOE doesn't use those values for [www.fueleconomy.gov](http://www.fueleconomy.gov)---they calculate their own values based on the weekly average fuel prices in the U.S.

The next normal posting of 2015 FE Label data will be on Aug 1, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

I'm out of the office on Monday but back on Tues (7/29).

Thanks

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 7/10/2014 7:34:51 PM  
**Subject:** 2015 FE Guide - data in Verify  
VW\_Group\_2015 FEGuide-all rel dates-no-sales-7-10-2014.xlsx

Richard

Here's the data just after our macro ran. I haven't had time to clean it up for the Veneno carline name change, etc.

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** oliver.schmidt@vw.com[oliver.schmidt@vw.com]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Thur 7/3/2014 9:04:27 PM  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of July 1, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-7-1-2014.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of July 1, 2014

Attached are the data in Verify as of July 1, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on July 9, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Thur 6/26/2014 1:53:18 PM  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of June 23, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-6-23-2014.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of June 23, 2014

Attached are the data in Verify as of June 23, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on July 1, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Mon 6/23/2014 3:14:26 PM  
**Subject:** 2015 FE Guide as of Fri (6/20) attached  
VW\_Group\_2015 FEGuide-all rel dates-no-sales-6-20-2014.xlsx

Richard,

Here's the data as is after running the macro. I didn't have time to clean up the data----e.g. add the Veneno to the Aventador carline name, etc. The macro picked up an error in the Diesel Passat.

Call me if questions.

Davc

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Thur 6/5/2014 3:14:13 PM  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of June 4, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-6-4-2014.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of June 4, 2014

Attached are the data in Verify as of June 4, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on June 9, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Wed 6/4/2014 6:48:57 PM  
**Subject:** RE: 5-cycle Calculation Method and Flex Fueled Test Groups

Richard,

Ethanol FE label calcs are in 600.210-08(a)(3).

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, June 04, 2014 6:42 AM  
**To:** Good, David  
**Subject:** 5-cycle Calculation Method and Flex Fueled Test Groups

Hi Dave;

Is it possible to enter fuel economy testing using two different calculation methods for flexible fueled models? For example; in Verify there are three FE label calculation approaches for gasoline or diesel models, the other choices are related to BEV and PHEV, but this choice is only presented once. When we do a FFV label we have both a gasoline calculation and an E85 calculation per index. It would seem to me that this would not allow the use of a 5-cycle approach for gasoline and a derived 5-cycle approach for E85 within the same index. Is that the intent, or am I missing something?

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Fri 5/30/2014 12:49:28 PM  
**Subject:** RE: 2015 FE Guide - Errors in EPA's data base as of May 28, 2014 [Thanks] NNTO

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Friday, May 30, 2014 6:49 AM  
**To:** Good, David  
**Cc:** Snyder, Jim  
**Subject:** RE: 2015 FE Guide - Errors in EPA's data base as of May 28, 2014

Thanks Dave. The errors were corrected in Verify today and should be good now.

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Thursday, May 29, 2014 5:42 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of May 28, 2014

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of May 28, 2014

Attached are the data in Verify as of May 28, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO<sub>2</sub> values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO<sub>2</sub> values).]

The next normal posting of 2015 FE Label data will be on June 1, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Thur 5/29/2014 9:41:35 PM  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of May 28, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-5-28-2014.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of May 28, 2014

Attached are the data in Verify as of May 28, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on June 1, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Fri 5/16/2014 7:26:04 PM  
**Subject:** RE: BEV and the Guide  
2014 generic EV Label calculations-1-18-13.xls  
EV Verify Rel 9and10-Charge Depleting example data.8-9-2012.pdf

Richard,

Attached are some EV templates for calculating FE Label values, entering CD data into Verify, etc.

For CAFE calcs, I think Bob Peavyhouse uses the CD range and the recharge energy to determine the CAFE energy consumption---e.g. values from the city & hwy EV test data which manufacturers enter into Verify (my example data).

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Friday, May 09, 2014 9:18 AM  
**To:** Good, David  
**Subject:** BEV and the Guide

Hi Dave;

When you are back in the office on Monday or Tuesday, can we talk about BEV and the information needed for Verify and the fuel economy labeling program? This is our first BEV and I am not up to speed on data needed for the program. Please give me a call when you can discuss.

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

## Example - Charge Depleting Data for an Electric Vehicle

U.S. Environmental Protection Agency  
Verify: Engine and Vehicle Compliance System

Welcome, David Good. Today is Monday, November 28, 2011 (ET)

VERIFY Intranet Home

[Back](#) [Help](#) [Logout](#)

Record Number:

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>
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of 0

[Search](#)[Search Results](#)

## Test Information Details

[Test Information](#) [EPA Tab](#)

## General Information

Process Code	Correction Submission	Mfr Code	MTX - Mitsubishi Motors Corporation
Test Number	CMTX10016275	Exhaust Evap Test Number Link	
Vehicle ID / Configuration	EB12-EM21/0	Test Date	2011-08-15

## EPA Only Fields

Dataset Status	Active	Submission Date	11/21/2011
Test Category	Charge Depleting	LOD Test Number	
EPA Dyno Number		Test 5-Cycle Category	Not 5-Cycle

## Test Particulars

Test Procedure	81 - Charge Depleting UDDS	Test Fuel Type	62 - Electricity
Verify Test Lab ID	1	Odometer Units	M
Test Start Odometer Reading	300	4WD Test Dyno	No
State of Charge Delta Indicator	No	Fuel Batch ID	MOKZEV
Fuel Batch Mfr Code	MTX	Diesel Adjustment Factor	Downward
Fuel Batch Calibration Number	1101	Usage	
Retest Indicator	No	Retest Reason	N/A
Verify Test Number That Was Retested		Manufacturer Confirmatory Test?	No
Original Manufacturer Verify-Test Number That Was Confirmed			

## Analytically-Derived FE / CREE

Analytically Derived?	No	ADFE Base Verify Test Number	
ADFE Total Road Load Horsepower	N/A	ADFE ETW	N/A
ADFE N/V Ratio	N/A		

## PHEV/Charge Depleting Test Information

Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	18.3012
Charge Depleting Range (Calculated miles)	97.935	Charge Depleting Range (Actual miles)	97.935
Equivalent All Electric Range (miles)	97.935	Number of Charge Depleting Bags / Phases Conducted	1
Fuel Economy Value Units	miles per gallon		

Please enter  
(Unadjusted test data.)

Please be sure to enter  
units of mpg

## Test Results

UDDS/Highway/US06 Bag/Phase Number 1

Test Result Name	Unrounded Test	Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value
ACT-DISTANCE ( Actual Distance Driven (miles) )	97.935	-
AMP-HRS ( Integrated Amp-hours )	0	-
AS-VOLT ( Average System Voltage )	0	-
CO ( Carbon Monoxide )	0	-
CO2 ( Carbon dioxide )	0	-
CREE ( Carbon-Related Exhaust Emissions )	0	-
END-SOC ( System End State of Charge )	0	-

Amp <del>(hours)</del>			
HC-TOTAL ( Total Hydrocarbon )	0		
MFR FE ( Manufacturer Fuel Economy )	180.4		180.4
NOX ( Nitrogen Oxide )	0		
START-SOC ( System Start State of Charge )	0		
Amp <del>(Watt-hours)</del>			

## Verify-Calculated Fields

System Miles 289

## Fuel Economy

Unrounded Unadjusted Fuel Economy  
Unrounded Adjusted Fuel EconomyRounded Unadjusted Fuel Economy  
Rounded Adjusted Fuel Economy

## CREE / OPT-CREE

Unrounded Unadjusted CREE  
Unrounded Adjusted CREE  
Unrounded Unadjusted OPT-CREE  
Unrounded Adjusted OPT-CREERounded Unadjusted CREE  
Rounded Adjusted CREE  
Rounded Unadjusted OPT-CREE  
Rounded Adjusted OPT-CREE

## Manufacturer Test Comments

This is official EPA confirmatory data. (Temporarily, inputted by Mfr.) UDDS AER(mile):97.935 , AC Energy(kWh/100mile):18.6705

[View Related Confirmatory Test Decision Information](#)[EPA@Work Home](#) | [EPA Home](#) | [Accessibility](#)URL: <https://verify-as1.nvfel-pmn1.epa.gov:8080/verify-web/cft/ld/testInfoUpdateRetrieve.do>

$$\text{MFR FE} = \frac{33,705 \text{ (kW-hr)}}{\text{Recharge Event Energy ( kW-hr )}} \times \text{charge depleting range ( miles )}$$

ASTM Round to tenths  
(units are MPG<sub>e</sub>)



## U.S. Environmental Protection Agency Verify: Engine and Vehicle Compliance System

VERIFY Intranet Home

Home &gt; Light-Duty Vehicle &amp; Truck &gt; Fuel Properties Details

Welcome, David Good. Today is Monday, November 28, 2011 (ET)

[Back](#) [Help](#) [Logout](#)

Record Number:

< >

of 0

### Fuel Properties Details

#### General Information

Mfr Code	MTX	Fuel Batch Id	MOKZEV
Submission Date	11/20/2011	Test Fuel Type	62 - Electricity
Fuel Calibration Number	1101	Fuel Batch Calibration Ineffective Date	
Fuel Batch Calibration Effective Date	2011-05-23		
Fuel Batch Calibration Date	2011-03-01		
Carbon Weight Fraction NMHC		Carbon Weight Fraction HC	
Exhaust Carbon Weight Fraction			
Fuel Methanol Volume Fraction		Fuel Density	
Fuel Specific Gravity		Fuel Net Heating Value	
Fuel Blend Carbon Weight Fraction		Weight Fraction CO2	

[EPA@Work Home](#) | [EPA Home](#) | [Accessibility](#)URL: <https://verify-as1.nvfel-pmn1.epa.gov:8080/verify-web/cft/lid/fuelPropUpdateRetrieve.do>

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Fri 4/18/2014 2:49:13 PM  
**Subject:** 2015 FE Guide - data attached  
VW\_Group\_2015 FEGuide-all rel dates-no-sales-4-18-2014.xlsx

Richard,

Here's the data in Verify as of 10AM 4/18. I didn't see that the macro picked up any errors.

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Fri 4/4/2014 3:33:54 PM  
**Subject:** re: 2014 & 2015 FE Guide - Errors in EPA's data base as of April 1, 2014  
VW Group 2014 FEGuide-all rel dates-no-sales-4-1-2014.xlsx  
VGA2015 FEGuide-all rel dates-no-sales-4-1-2014.xlsx

Richard,

re: 2014 & 2015 FE Guide - Errors in EPA's data base as of April 1, 2014

The macro picked up an error in a 2014 Bentley label.

Attached are the data in Verify as of April 1, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov).

The next normal posting of 2014 FE Label data will be on April 15, 2014 (on a monthly schedule where I run the query on the 1st and 15th of the month).

The next normal posting of 2015 FE Label data will be on April 9, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month).

If you need an important 2014 or 2015 FE Label posted on the web before the next posting, please send me an email message and I'll be glad to have it posted earlier.

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave



**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Fri 3/21/2014 4:05:16 PM  
**Subject:** RE: 2014 Bentley Label Correction

Richard,

I'm just trying to identify gross data input mistakes. If I make the tolerance tighter, I'll come up with a lot of errors (which aren't really errors).

8887 is only approximate---it isn't really correct for Phase II test fuel. Test-to-test variability is approx 3%; etc etc.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Friday, March 21, 2014 8:43 AM  
**To:** Good, David  
**Subject:** RE: 2014 Bentley Label Correction

Hi Dave;

You don't think the tolerance should be a little tighter than plus or minus 5%? On something like a Bentley model 5% of 488 is about 24 g/mi, three percent would be about 15 g/mi, 2 % would be less than 10 g/mi. Is the 5% coming from the study that Rob French did in January, when he caught a few outliers? In our case, he found two of over one hundred labels I did back then. Let me know what you think about using a lower percentage for your plausibility check.

Best regards,

Richard

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Thursday, March 20, 2014 9:54 AM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: 2014 Bentley Label Correction

Richard,

Next week I plan to add an error check of the CO2 values using the 8887 and 10180 factors (+/- 5%) to the macro. I don't think the error check would have caught that one.

Dave

**From:** Thomas, Richard (EEO) [<mailto:Richard.Thomas@vw.com>]  
**Sent:** Thursday, March 20, 2014 8:31 AM  
**To:** Good, David  
**Subject:** 2014 Bentley Label Correction

Hi Dave;

I found an error in my CO2 calculation for the 2014 Bentley Continental GT with 4.0L V8, index #026. I made the correction this morning in Verify. The label CO2 value decreases from 488 to 485 g/mi.

Has there been any further changes to Verify or your audit program that would compare the calculated label model type combined MPG value into label CO2 value using the gasoline 8887 and the 10180 factor for Diesel fuel?

Please let me know if you need anything else.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 3/20/2014 1:53:32 PM  
**Subject:** RE: 2014 Bentley Label Correction

Richard,

Next week I plan to add an error check of the CO2 values using the 8887 and 10180 factors (+/- 5%) to the macro. I don't think the error check would have caught that one.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Thursday, March 20, 2014 8:31 AM  
**To:** Good, David  
**Subject:** 2014 Bentley Label Correction

Hi Dave;

I found an error in my CO2 calculation for the 2014 Bentley Continental GT with 4.0L V8, index #026. I made the correction this morning in Verify. The label CO2 value decreases from 488 to 485 g/mi.

Has there been any further changes to Verify or your audit program that would compare the calculated label model type combined MPG value into label CO2 value using the gasoline 8887 and the 10180 factor for Diesel fuel?

Please let me know if you need anything else.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Wed 2/26/2014 5:43:43 PM  
**Subject:** RE: please call  
VGA2015 FEGuide-all rel dates-no-sales-2-26-2014.xlsx

Richard,

Here you go,

[I had macro problems yesterday.]

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, February 26, 2014 10:12 AM  
**To:** Good, David  
**Subject:** please call  
**Importance:** High

Hi Dave;

I had to make changes to 2015 VGA index 007 and 006 and the annual fuel cost and 5 year savings values. If you ran that report yesterday could you see that the label audit is run again today to pick up these changes.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road

Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Good, David[good.david@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Fri 4/25/2014 11:16:31 AM  
**Subject:** RE: 2015 FE Guide - Errors in EPA's data base as of April 23, 2014

Thanks Dave, I corrected the adjusted rounded highway CO2 value this morning for the Audi Q7 3.0L gasoline engine and index #051. It was only a ASTM rounding error.

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Thursday, April 24, 2014 3:04 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of April 23, 2014

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of April 23, 2014

Attached are the data in Verify as of April 23, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11--(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on May 1, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

If you need an important 2014 or 2015 FE Label posted on the web before the next posting, please send me an email message and I'll be glad to have it posted earlier.

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Mon 4/21/2014 12:22:06 PM  
**Subject:** RE: 2015 FE Guide - data attached

Thanks Dave.

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Friday, April 18, 2014 10:49 AM  
**To:** Thomas, Richard (EEO)  
**Subject:** 2015 FE Guide - data attached

Richard,

Here's the data in Verify as of 10AM 4/18. I didn't see that the macro picked up any errors.

Dave

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Tue 4/1/2014 6:04:19 PM  
**Subject:** RE: 2015 Fuel Economy audit

Not a problem Dave; we usually add the word “quattro” for AWD to carline names if there is also a front wheel drive version available. I just noticed in the guide that many manufacturers sometimes have a AWD, 4WD or 2WD added to the carline name. I won’t create any additional work for ya.

Thanks,

Richard

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Tuesday, April 01, 2014 2:00 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: 2015 Fuel Economy audit

Richard,

See may answer below:

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Tuesday, April 01, 2014 7:18 AM  
**To:** Good, David  
**Subject:** RE: 2015 Fuel Economy audit

Thank you Dave, I corrected three labels to reflect a 15% maximum percentage of ethanol, but the release date is not until June anyway.

I have one additional question on carline names. If a new model is available as all-wheel drive and front wheel drive and we don’t make a distinction in the carline name will Verify amend the

carline name automatically with an “AWD” and a “2WD” to distinguish them in the guide? D. Good Ans: No, that is something I must do by hand. Please add “AWD” to the carline name as soon as possible, e.g. at the start of the model year---or at the next model year if you already have been issued a certificate without “AWD” added to the carline name.

Thanks,

Richard

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Monday, March 31, 2014 7:09 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: 2015 Fuel Economy audit

Richard,

Here you go---I didn't see any errors.

I'll run the query tomorrow around 10AM for the data to be sent to DOE---so if you need to make changes, please make them before 10AM or email me.

Dave

**From:** Thomas, Richard (EEO) [<mailto:Richard.Thomas@vw.com>]  
**Sent:** Monday, March 31, 2014 1:44 PM  
**To:** Good, David  
**Subject:** 2015 Fuel Economy audit

Hi Dave;

Just a reminder, we spoke last Thursday and you said you might be able to send me the audit of the Volkswagen Group 2015 fuel economy labels before you sent the information off to Janet on the first of April.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Tue 3/25/2014 10:24:42 AM  
**Subject:** 2015 Volkswagen Group Fuel Economy Labels

Hi Dave;

I just wanted to let you know that since we spoke last time, I have added three new 2015 Bentley fuel economy labels and seven new 2015 Audi labels.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Fri 3/21/2014 12:43:09 PM  
**Subject:** RE: 2014 Bentley Label Correction

Hi Dave;

You don't think the tolerance should be a little tighter than plus or minus 5%? On something like a Bentley model 5% of 488 is about 24 g/mi, three percent would be about 15 g/mi, 2 % would be less than 10 g/mi. Is the 5% coming from the study that Rob French did in January, when he caught a few outliers? In our case, he found two of over one hundred labels I did back then. Let me know what you think about using a lower percentage for your plausibility check.

Best regards,

Richard

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Thursday, March 20, 2014 9:54 AM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: 2014 Bentley Label Correction

Richard,

Next week I plan to add an error check of the CO2 values using the 8887 and 10180 factors (+/- 5%) to the macro. I don't think the error check would have caught that one.

Dave

**From:** Thomas, Richard (EEO) [mailto:[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)]  
**Sent:** Thursday, March 20, 2014 8:31 AM  
**To:** Good, David  
**Subject:** 2014 Bentley Label Correction

Hi Dave;

I found an error in my CO2 calculation for the 2014 Bentley Continental GT with 4.0L V8, index #026. I made the correction this morning in Verify. The label CO2 value decreases from 488 to 485 g/mi.

Has there been any further changes to Verify or your audit program that would compare the calculated label model type combined MPG value into label CO2 value using the gasoline 8887 and the 10180 factor for Diesel fuel?

Please let me know if you need anything else.

Thanks,

Richard

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Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 3/19/2014 2:38:20 PM  
**Subject:** RE: 2015 Audi Fuel Economy

Dave;

The correction to the 2014 label index #014 was only the unadjusted unrounded highway and combined values and does not affect the 5-cycle method calculated combined CO2 label value. The highway unadjusted CO2 value is now 231.0 and the combined unadjusted unrounded is now 295.4 g/mi. Is this what you wanted?

RET

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Wednesday, March 19, 2014 10:32 AM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: 2015 Audi Fuel Economy

Richard,

I sent the 2015 FE Label update to DOE yesterday. I'm working on 2014 today. I'll run a new 2015 query Thurs or Fri and let you know if you have any errors.

Can you send me the corrected values for 2014 Index 14?

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, March 19, 2014 8:46 AM  
**To:** Good, David

**Subject:** 2015 Audi Fuel Economy

Hi Dave;

For your information, I just added four new 2015 Audi brand fuel economy labels to Verify and corrected the unadjusted unrounded highway and combined CO2 values for the 2014 Audi Q5 (TDI) index# 014. I think you said you were going to review the 2015 labels this week, so I would like to see your audit, if you run it. Have a good day.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 3/19/2014 12:45:37 PM  
**Subject:** 2015 Audi Fuel Economy

Hi Dave;

For your information, I just added four new 2015 Audi brand fuel economy labels to Verify and corrected the unadjusted unrounded highway and combined CO2 values for the 2014 Audi Q5 (TDI) index# 014. I think you said you were going to review the 2015 labels this week, so I would like to see your audit, if you run it. Have a good day.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Good, David[good.david@epa.gov]  
**Cc:** Wehrly, Linc[wehrly.linc@epa.gov]; [Ex. 7]@vww.com; Snyder, Jim[Snyder.Jim@epa.gov]; David J. Friedman (David.Friedman@dot.gov)[David.Friedman@dot.gov]  
**From:** [Ex. 7]  
**Sent:** Mon 3/17/2014 6:29:47 PM  
**Subject:** Copy of 2013 Volkswagen Final Passenger Car CAFE and CREE Reports  
Final CAFE & CREE 2013 LDV to EPA .pdf

Hello Dave;

Please find a copy of the 2013 Volkswagen Group Final Passenger Car (Import and Domestic) CAFE and Passenger Car CREE reports. The Verify final status was set to yes. All Verify entered data was processed under the manufacturer code VWX for 2013 model year. If you have any questions please let me know.

Best regards,

[Ex. 7]

[Ex. 7]

VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: [Ex. 7]  
Fax: [Ex. 7]

[Ex. 7]

# VOLKSWAGEN

GROUP OF AMERICA

Ms. Gina McCarthy, Administrator  
U.S. Environmental Protection Agency HQ  
William Jefferson Clinton Building  
1200 Pennsylvania Ave, N.W.  
Mail Code 1101A  
Washington, D.C. 20460

Mr. Oliver Schmidt Name  
General Manager Title  
EEO Department  
248 754 4201 Phone  
248 754 4207 Fax  
Oliver.Schmidt@vw.com E-Mail

March 17, 2014 Date

Subject: Volkswagen Group 2013 Final Passenger Car CAFE/CREE Reports

Dear Ms. McCarthy;

Enclosed are the 2013 Final Passenger Car CAFE and CREE reports in accordance with the regulations contained in 40 CFR 600.512-12. These reports have been processed and successfully submitted into the EPA Verify system.

Following is the manufacturer's calculation for the 2013 final fuel economy average. This calculation is provided for the Volkswagen Group of America, Inc. (Volkswagen) Import and Domestic Passenger Car categories. The final CAFE values are based upon approved EPA fuel economy data and final production volumes for the 2013 model year vehicles. The Volkswagen brands for the 2013 Passenger Car CAFE reports include the brands of Volkswagen, Audi, Bentley, Lamborghini, Bugatti and Porsche.

The Import Passenger Car category Baseline (Non-AMFA) CAFE adjusted value is 33.0 MPG. The adjusted CAFE with AMFA Credits included is 34.0 MPG. This value does not exceed the maximum cap and increase for 2013 of 1.2 MPG as specified in paragraph (h) of 40 CFR 600.510-12.

The calculated reformed CAFE Import category standard is 34.4 MPG, as specified in paragraph (c) of 49 CFR 531.5.

The Domestic Passenger Car category final adjusted CAFE value is 35.0 MPG.

The calculated reformed CAFE Domestic category standard is 32.8 MPG, as specified in paragraph (c) of 49 CFR 531.5.

The footprint based reformulated CAFE standards are derived using measurement methods which comply with Department of Transportation and EPA requirements.

VOLKSWAGEN GROUP OF AMERICA, INC.  
3800 HAMILIN ROAD  
AUBURN HILLS, MI 48326  
PHONE +1 248 754 5000

The domestic content calculation as requested in the EPA certification mail-out CD-92-06 is summarized below. The specific calculations and monetary result materials are available upon request. The Volkswagen procedure for this calculation follows the procedure outlined in 40 CFR 600.511-08. Our procedure is described as follows:

For vehicles produced outside of the NAFTA territory, the "declared value" of foreign components is basically, the ex-factory value of each of the models which we have imported. The freight and insurance is added to this value and is labeled as "adjusted import value". The value of U.S. components has not been excluded because this value is included in the declared value upon importation of the vehicles. The "cost of production" as defined in the regulations equates to our wholesale price to the dealer.

The following Imported Volkswagen vehicle brands and carlines produced outside the NAFTA territory do not exceed the 75% criteria for the domestic category classification.

Volkswagen	Audi	Bentley	Lamborghini	Bugatti
Golf / Golf R	A3	Mulsanne	Gallardo Coupe	Veyron
GTI	A3 quattro	Continental Flying Spur	Gallardo Spyder	
CC	A4 / S4	Continental GT	Aventador Coupe	
CC 4Motion	A4 quattro	Continental GTC	Aventador Spyder	
Tiguan	A5 quattro / A5 Cabriolet quattro / S5 / S5 Cabriolet	Continental Supersport Convertible		
Touareg	allroad quattro			
Eos	A6 / A6 quattro			
	A7 quattro / S7			
	A8 / A8L / S8			
	TT Coupe quattro			
	TT Roadster quattro			
	TTRS			

Porsche
Boxster / Boxster S / 911 Carrera / 911 Carrera S / 911 Carrera 4 / 911 Carrera 4S
911 Carrera Cabriolet / 911 Carrera S Cabriolet / 911 Carrera 4 Cabriolet
911 Carrera 4S Cabriolet / Panamera / Panamera 4 / Panamera S / Panamera 4S
Panamera GTS / Panamera Turbo / Panamera Turbo S / Panamera Hybrid / 911 Turbo
911 Turbo S / 911 Turbo Cabriolet / 911 Turbo S Cabriolet

For vehicles produced within the NAFTA territory (Mexico), we followed the procedure established according to NAFTA Appendix 300-A.3, where Paragraph 1 states:

"For purposes of the Energy Policy and Conservation Act of 1975, 42 U.S.C. 6201...the United States shall consider an automobile to be domestically manufactured in any model year if at least 75 percent of the cost to the manufacturer of such automobile is attributable to value added in Canada, Mexico or the United States...Paragraph 1 shall apply beginning with the next model year after January 1, 2004, where the enterprise subject to the fuel economy requirements for those automobiles under the CAFE Act, has not made an election under subparagraph a)."

For purposes of paragraph 1, and according to 40 CFR 600.511-08, the ratio obtained in the domestic production determination was obtained from dividing the sum of the declared value (as defined in §600.502) of all of the imported components installed or included on

automobiles produced within such a car line within a given model year plus the cost of transportation and insuring such components to the United States Port of entry, by the cost of production (as defined in §600.502) of all automobiles within such a car line.

The calculated results for each of the Volkswagen carlines: Jetta, Jetta Hybrid, Jetta SportWagen Beetle and Beetle Convertible are greater than the 0.25 ratio and therefore all Volkswagen Group carlines, with the exception of the Passat, are determined to be Import within the Import category Passenger Car report.

The Volkswagen Passat models, assembled in the Chattanooga, Tennessee USA manufacturing facility, are in the Domestic category Passenger Car report.

Additionally, we herewith submit the 2013 Volkswagen model year Passenger Car CREE Final Report. This 2013 model year submission includes Volkswagen, Audi, Bentley, Lamborghini and Bugatti brand passenger cars. Enclosed is the manufacturer's calculated fleet average and documents providing the necessary information to establish the fleet average. The calculated fleet average is determined in accordance with 40 CFR 600.510-12 (j)(2)(iv). This final value is then capped at **265** g/mi CREE after application of the maximum decrease in average CREE determined in accordance with 40 CFR 600.510-12(i).

The footprint based CO<sub>2</sub> standard of **257** g/mi is determined in accordance with 40 CFR 86.1818-12.

Please note that Volkswagen intends to provide additional information required by 86.1865-12 by May 1, 2014.

Enclosed is the list of vehicle models and test parameters and in-use CREE standards in accordance with 600.512-12(c)(11).

If there are any questions concerning this report, please contact Leonard Kata of my staff at (248) 754-4204.

Sincerely,  
Volkswagen Group of America, Inc.

  
Mr. Oliver Schmidt  
General Manager  
Engineering and Environmental Office

Attachments

cc: David J. Friedman, Acting Administrator  
U.S. DOT, National Highway Traffic Safety Administration

Byron Bunker, Director  
U.S. EPA, Compliance Division

# 2013 VWGoA Import Passenger Car CAFE Baseline

INDEX #	Brand	Carline	DISP L/CID	Trans	CITY	HWY	COMB Round	Model Type Sales	Weighted Sales/MPG
073	Audi	A3	2.0 / 120	S6	39.0620	59.3190	46.2		
058	Audi	A3	2.0 / 121	M6	25.3000	40.3000	30.4		
059	Audi	A3	2.0 / 121	S6	26.6000	38.2000	30.8		
060	Audi	A3 quattro	2.0 / 121	S6	27.2000	37.1000	30.9		
035	Audi	A4	2.0 / 121	AV	30.1160	44.4305	35.2		
040	Audi	A4 quattro	2.0 / 121	M6	27.6093	43.8849	33.1		
041	Audi	A5 quattro	2.0 / 121	M6	27.6093	43.8849	33.1		
037	Audi	A4 quattro	2.0 / 121	S8	25.3798	40.5189	30.5		
038	Audi	A5 quattro	2.0 / 121	S8	25.3798	40.5189	30.5		
039	Audi	A5 Cabriolet quattro	2.0 / 121	S8	25.3798	40.5189	30.5		
134	Audi	allroad quattro	2.0 / 121	S8	25.2000	37.3000	29.5		
102	Audi E85	A4 quattro	2.0 / 121	S8	25.7950	40.5561	30.8		
103	Audi E85	A5 quattro	2.0 / 121	S8	25.7950	40.5561	30.8		
104	Audi E85	A5 Cabriolet quattro	2.0 / 121	S8	25.7950	40.5561	30.8		
101	Audi E85	allroad quattro	2.0 / 121	S8	25.2000	37.3000	29.5		
036	Audi	A5 Cabriolet	2.0 / 121	AV	30.1160	44.4305	35.2		
065	Audi	A6	2.0 / 121	AV	31.4000	46.9000	36.9		
070	Audi	A6 quattro	2.0 / 121	S8	25.3798	40.5189	30.5		
077	Audi	A6 quattro	3.0 / 183	S8	23.1369	38.1000	28.1		
076	Audi	A7 quattro	3.0 / 183	S8	22.3225	37.2632	27.2		
128	Audi	A8	3.0 / 183	S8	22.3225	37.2632	27.2		
129	Audi	A8L	3.0 / 183	S8	22.3225	37.2632	27.2		
098	Audi	A8	4.0 /	S8	21.7885	38.4000	27.1		
097	Audi	A8L	4.0 /	S8	19.8586	33.9000	24.4		
099	Audi	S8	4.0 /	S8	19.0000	33.3000	23.6		
109	Audi	A8L	6.3 / 384	S8	15.9000	25.7000	19.2		
047	Audi	S7	4.0 /	S7	20.6682	34.7086	25.3		
048	Audi	S6	4.0 /	S7	20.6682	34.7086	25.3		
049	Audi	RSS	4.2 / 254	S7	19.1000	30.0000	22.8		
052	Audi	RSS Cabriolet	4.2 / 254	S7	19.2000	28.9000	22.6		
045	Audi	S4	3.0 / 183	M6	20.0000	33.4000	24.4		
046	Audi	S5	3.0 / 183	M6	20.0000	33.4000	24.4		
042	Audi	S4	3.0 / 183	S7	22.4000	35.8000	26.9		
043	Audi	S5	3.0 / 183	S7	22.4000	35.8000	26.9		
044	Audi	S5 Cabriolet	3.0 / 183	S7	22.1000	34.7000	26.4		
066	Audi	TT Coupe quattro	2.0 / 121	S6	27.6693	40.7741	32.3		
067	Audi	TT Roadster quattro	2.0 / 121	S6	27.6693	40.7741	32.3		
069	Audi	TTRS Coupe	2.5 / 151	M6	21.2000	34.2000	25.6		
096	Bentley	Mulsanne	6.8 / 412	S8	12.9000	21.8000	15.8		
110	Bentley E85	Continental Flying Spur	6.0 / 366	S6	13.7000	24.6000	17.1		
113	Bentley E85	Continental GT	6.0 / 366	S6	13.9000	24.7000	17.3		
111	Bentley E85	Continental GTC	6.0 / 366	S6	13.7000	24.6000	17.1		
112	Bentley E85	Continental Supersports Convertible	6.0 / 366	S6	13.9000	24.7000	17.3		
131	Bentley E85	Continental GT	6.0 / 366	S8	15.4000	28.3000	19.4		
130	Bentley E85	Continental GTC	6.0 / 366	S8	14.4000	26.7000	18.2		
108	Bentley	Continental GT	4.0 /	S8	19.0000	33.5000	23.6		
107	Bentley	Continental GTC	4.0 /	S8	17.4000	30.8000	21.6		
088	Bugatti	Veyron	V16 / 488	L7	10.0000	17.9000	12.5		
092	Lamborghini	Aventador Coupe	6.5 / 396	S7	12.6000	25.2000	16.3		
093	Lamborghini	Aventador Roadster	6.5 / 396	S7	11.5000	21.2000	14.5		
032	Lamborghini	Gallardo Coupe	5.2 / 303	M6	14.0000	24.0000	17.2		
030	Lamborghini	Gallardo Coupe	5.2 / 303	S6	16.1000	25.4000	19.3		
033	Lamborghini	Gallardo Spyder	5.2 / 303	M6	13.0000	22.6000	16.1		
031	Lamborghini	Gallardo Spyder	5.2 / 303	S6	16.0000	25.4000	19.2		
089	Volkswagen	Beetle	2.0 / 121	M6	26.1929	42.1688	31.6		
019	Volkswagen	Beetle	2.0 / 121	S6	27.1059	41.8383	32.2		
027	Volkswagen	Beetle	R5 / 151	M5	26.3908	42.7715	31.9		
017	Volkswagen	Beetle	R5 / 151	S6	27.2108	38.8835	31.5		
020	Volkswagen	Beetle Convertible	2.0 / 121	S6	27.6991	40.6463	32.3		
090	Volkswagen	Beetle Convertible	2.0 / 121	M6	26.1929	42.1688	31.6		
018	Volkswagen	Beetle Convertible	R5 / 151	S6	26.3739	37.8501	30.5		
004	Volkswagen	CC	2.0 / 121	M6	25.7700	44.2070	31.7		
001	Volkswagen	CC	2.0 / 121	S6	27.0241	42.7996	32.4		
003	Volkswagen	CC 4MOTION	3.6 / 219	S6	20.5000	33.5000	24.8		

**Ex. 4 - CBI**

002	Volkswagen	CC	3.6 / 219	S6	21.2000	35.1000	25.8
021	Volkswagen	Eos	2.0 / 121	S6	27.5000	41.5000	32.4
081	Volkswagen	Golf (TDI)	2.0 / 120	M6	38.7349	59.8800	46.1
072	Volkswagen	Golf (TDI)	2.0 / 120	S6	39.0620	59.3190	46.2
026	Volkswagen	Golf	R5 / 151	M5	26.2330	44.2580	32.1
016	Volkswagen	Golf	R5 / 151	S6	27.5817	42.3567	32.7
057	Volkswagen	Golf R	2.0 / 121	M6	23.9000	37.1000	28.5
023	Volkswagen	GTI	2.0 / 121	M6	25.9143	41.0853	31.1
022	Volkswagen	GTI	2.0 / 121	S6	29.8063	43.2768	34.7
100	Volkswagen	Jetta Hybrid	1.4 /	S7	57.5000	65.3000	60.8
087	Volkswagen	Jetta	2.0 / 121	M5	28.8000	46.2000	34.7
086	Volkswagen	Jetta	2.0 / 121	S6	28.1000	41.4990	32.9
080	Volkswagen	Jetta (TDI)	2.0 / 120	M6	38.7349	59.8800	46.1
071	Volkswagen	Jetta (TDI)	2.0 / 120	S6	39.0620	59.3190	46.2
025	Volkswagen	Jetta	R5 / 151	M5	26.2330	44.2580	32.1
015	Volkswagen	Jetta	R5 / 151	S6	27.5817	42.3567	32.7
051	Volkswagen	Jetta [GLI]	2.0 / 121	M6	27.5574	45.1917	33.4
050	Volkswagen	Jetta [GLI]	2.0 / 121	S6	29.5285	44.8437	34.9
079	Volkswagen	Jetta SportWagen (TDI)	2.0 / 120	M6	38.7349	59.8800	46.1
074	Volkswagen	Jetta SportWagen (TDI)	2.0 / 120	S6	37.6000	56.2000	44.2
094	Volkswagen	Beetle (TDI)	2.0 / 120	S6	37.3000	55.3000	43.7
135	Volkswagen	Beetle Convertible (TDI)	2.0 / 120	S6	36.4000	51.9000	42.1
084	Volkswagen	Beetle (TDI)	2.0 / 120	M6	36.0583	57.9748	43.4
085	Volkswagen	Beetle Convertible (TDI)	2.0 / 120	M6	36.0583	57.9748	43.4
024	Volkswagen	Jetta SportWagen	R5 / 151	M5	26.2330	44.2580	32.1
014	Volkswagen	Jetta SportWagen	R5 / 151	S6	27.5817	42.3567	32.7
056	Volkswagen	Tiguan	2.0 / 121	M6	21.7000	35.8000	26.4
068	Volkswagen	Tiguan	2.0 / 121	S6	26.2279	36.8821	30.1
202	Porsche	Boxster	2.7L	A7	27.9000	44.9000	33.6
201	Porsche	Boxster	2.7L	M6	25.9000	41.5000	31.2
222	Porsche	Boxster S	3.4L	A7	26.3000	41.9000	31.6
221	Porsche	Boxster S	3.4L	M6	24.8000	38.5000	29.5
102	Porsche	911 Carrera	3.4L	A7	25.4000	39.5000	30.3
101	Porsche	911 Carrera	3.4L	M7	23.7000	38.2000	28.6
106	Porsche	911 Carrera S	3.8L	A7	24.6000	38.0000	29.2
105	Porsche	911 Carrera S	3.8L	M7	23.8449	37.9484	28.6
110	Porsche	911 Carrera 4	3.4L	A7	25.4965	38.6494	30.1
109	Porsche	911 Carrera 4	3.4L	M7	24.0491	37.8468	28.8
114	Porsche	911 Carrera 4S	3.8L	A7	24.2000	36.7000	28.6
113	Porsche	911 Carrera 4S	3.8L	M7	23.1000	36.9000	27.8
104	Porsche	911 Carrera Cabriolet	3.4L	A7	25.9904	39.4499	30.7
103	Porsche	911 Carrera Cabriolet	3.4L	M7	24.0491	37.9499	28.8
108	Porsche	911 Carrera S Cabriolet	3.8L	A7	23.9000	38.0000	28.7
107	Porsche	911 Carrera S Cabriolet	3.8L	M7	23.6474	37.0494	28.2
112	Porsche	911 Carrera 4 Cabriolet	3.4L	A7	24.9475	37.5494	29.4
111	Porsche	911 Carrera 4 Cabriolet	3.4L	M7	23.5983	36.5997	28.1
116	Porsche	911 Carrera 4S Cabriolet	3.8L	A7	23.3000	36.5000	27.8
115	Porsche	911 Carrera 4S Cabriolet	3.8L	M7	22.9000	36.1000	27.4
90	Porsche	Panamera	3.6L	A7	22.6000	37.3000	27.5
91	Porsche	Panamera 4	3.6L	A7	22.2000	36.5000	27.0
92	Porsche	Panamera S	4.8L	A7	20.2000	33.2000	24.5
93	Porsche	Panamera 4S	4.8L	A7	20.2000	33.2000	24.5
94	Porsche	Panamera GTS	4.8L	A7	19.7000	32.7000	24.0
95	Porsche	Panamera Turbo	4.8L	A7	18.5000	32.0000	22.8
96	Porsche	Panamera Turbo S	4.8L	A7	18.5000	32.0000	22.8
97	Porsche	Panamera Hybrid	3.0L	A8	30.4000	40.9000	34.4
50	Porsche	911 Turbo	3.8L	A7	20.6000	34.3000	25.1
52	Porsche	911 Turbo S	3.8L	A7	20.6000	34.3000	25.1
54	Porsche	911 Turbo	3.8L	M6	20.5000	33.2000	24.8
51	Porsche	911 Turbo Cabriolet	3.8L	A7	19.7489	33.8482	24.3
53	Porsche	911 Turbo S Cabriolet	3.8L	A7	19.7489	33.8482	24.3
55	Porsche	911 Turbo Cabriolet	3.8L	M6	20.0000	33.1000	24.3

Ex. 4 - CBI

VOLKSWAGEN GROUP Total Projected Units
Baseline unadj unrounded w/o FFV (MPG)
Baseline adjusted unrounded w/o FFV (MPG)
Baseline adjusted rounded w/o FFV (MPG)

# 2013 VWGoA Import Passenger Car CAFE AMFA

INDEX #	Brand	Carline	DISP L/CID	Trans	ETW	IW	CITY	HWY	COMB Round	Model Type Sales	Weighted Sales/MPG
073	Audi	A3	2.0 / 120	S6		3500	39.0620	59.3190	46.2		
058	Audi	A3	2.0 / 121	M6		3500	25.3000	40.3000	30.4		
059	Audi	A3	2.0 / 121	S6		3500	26.6000	38.2000	30.8		
060	Audi	A3 quattro	2.0 / 121	S6		4000	27.2000	37.1000	30.9		
035	Audi	A4	2.0 / 121	AV		4000	30.1160	44.4305	35.2		
040	Audi	A4 quattro	2.0 / 121	M6	4000	4000	27.6093	43.8849	33.1		
041	Audi	A5 quattro	2.0 / 121	M6		4000	27.6093	43.8849	33.1		
037	Audi	A4 quattro	2.0 / 121	S8	4000	4000	25.3798	40.5189	30.5		
038	Audi	A5 quattro	2.0 / 121	S8	4000	4000	25.3798	40.5189	30.5		
039	Audi	A5 Cabriolet quattro	2.0 / 121	S8		4000	25.3798	40.5189	30.5		
134	Audi	allroad quattro	2.0 / 121	S8		4000	25.2000	37.3000	29.5		
102	Audi E85	A4 quattro	2.0 / 121	S8	4000	4000	42.3928	66.9352	50.8		
103	Audi E85	A5 quattro	2.0 / 121	S8	4000	4000	42.3928	66.9352	50.8		
104	Audi E85	A5 Cabriolet quattro	2.0 / 121	S8		4000	42.3928	66.9352	50.8		
101	Audi E85	allroad quattro	2.0 / 121	S8		4000	41.2759	61.2201	48.4		
036	Audi	A5 Cabriolet	2.0 / 121	AV		4000	30.1160	44.4305	35.2		
065	Audi	A6	2.0 / 121	AV	4000	4000	31.4000	46.9000	36.9		
070	Audi	A6 quattro	2.0 / 121	S8		4000	25.3798	40.5189	30.5		
077	Audi	A6 quattro	3.0 / 183	S8		4000	23.1369	38.1000	28.1		
076	Audi	A7 quattro	3.0 / 183	S8		4500	22.3225	37.2632	27.2		
128	Audi	A8	3.0 / 183	S8		4500	22.3225	37.2632	27.2		
129	Audi	A8L	3.0 / 183	S8		4500	22.3225	37.2632	27.2		
098	Audi	A8	4.0 /	S8		4500	21.7885	38.4000	27.1		
097	Audi	A8L	4.0 /	S8		4500	19.8586	33.9000	24.4		
099	Audi	S8	4.0 /	S8		5000	19.0000	33.3000	23.6		
109	Audi	A8L	6.3 / 384	S8		5000	15.9000	25.7000	19.2		
047	Audi	S7	4.0 /	S7		4500	20.6682	34.7086	25.3		
048	Audi	S6	4.0 /	S7		4500	20.6682	34.7086	25.3		
049	Audi	RSS	4.2 / 254	S7		4000	19.1000	30.0000	22.8		
052	Audi	RSS Cabriolet	4.2 / 254	S7		4500	19.2000	28.9000	22.6		
045	Audi	S4	3.0 / 183	M6		4000	20.0000	33.4000	24.4		
046	Audi	S5	3.0 / 183	M6		4000	20.0000	33.4000	24.4		
042	Audi	S4	3.0 / 183	S7		4000	22.4000	35.8000	26.9		
043	Audi	S5	3.0 / 183	S7		4000	22.4000	35.8000	26.9		
044	Audi	S5 Cabriolet	3.0 / 183	S7		4500	22.1000	34.7000	26.4		
066	Audi	TT Coupe quattro	2.0 / 121	S6		3500	27.6693	40.7741	32.3		
067	Audi	TT Roadster quattro	2.0 / 121	S6		3500	27.6693	40.7741	32.3		
069	Audi	TTRS Coupe	2.5 / 151	M6		3500	21.2000	34.2000	25.6		
096	Bentley	Mulsanne	6.8 / 412	S8		6000	12.9000	21.8000	15.8		
110	Bentley E85	Continental Flying Spur	6.0 / 366	S6		6000	22.5270	40.5507	28.2		
113	Bentley E85	Continental GT	6.0 / 366	S6		5500	23.1199	40.6448	28.7		
111	Bentley E85	Continental GTC	6.0 / 366	S6		6000	22.5270	40.5507	28.2		
112	Bentley E85	Continental Supersports Convertible	6.0 / 366	S6		5500	23.1199	40.6448	28.7		
131	Bentley E85	Continental GT	6.0 / 366	S8		5500	25.2459	47.0066	31.9		
130	Bentley E85	Continental GTC	6.0 / 366	S8		6000	23.8863	44.6725	30.2		
108	Bentley	Continental GT	4.0 /	S8		5500	19.0000	33.5000	23.6		
107	Bentley	Continental GTC	4.0 /	S8		6000	17.4000	30.8000	21.6		
088	Bugatti	Veyron	V16 / 488	L7		4500	10.0000	17.9000	12.5		
092	Lamborghini	Aventador Coupe	6.5 / 396	S7	4000	4000	12.6000	25.2000	16.3		
093	Lamborghini	Aventador Roadster	6.5 / 396	S7		4000	11.5000	21.2000	14.5		
032	Lamborghini	Gallardo Coupe	5.2 / 303	M6		3500	14.0000	24.0000	17.2		
030	Lamborghini	Gallardo Coupe	5.2 / 303	S6		3500	16.1000	25.4000	19.3		
033	Lamborghini	Gallardo Spyder	5.2 / 303	M6	4000	4000	13.0000	22.6000	16.1		
031	Lamborghini	Gallardo Spyder	5.2 / 303	S6	4000	4000	16.0000	25.4000	19.2		
089	Volkswagen	Beetle	2.0 / 121	M6		3500	26.1929	42.1688	31.6		
019	Volkswagen	Beetle	2.0 / 121	S6		3500	27.1059	41.8383	32.2		
027	Volkswagen	Beetle	R5 / 151	M5		3500	26.3908	42.7715	31.9		
017	Volkswagen	Beetle	R5 / 151	S6		3500	27.2108	38.8835	31.5		
020	Volkswagen	Beetle Convertible	2.0 / 121	S6		3500	27.6991	40.6463	32.3		
090	Volkswagen	Beetle Convertible	2.0 / 121	M6		3500	26.1929	42.1688	31.6		
018	Volkswagen	Beetle Convertible	R5 / 151	S6		3500	26.3739	37.8501	30.5		
004	Volkswagen	CC	2.0 / 121	M6		3500	25.7700	44.2070	31.7		
001	Volkswagen	CC	2.0 / 121	S6		3500	27.0241	42.7996	32.4		
003	Volkswagen	CC 4MOTION	3.6 / 219	S6		4000	20.5000	33.5000	24.8		
002	Volkswagen	CC	3.6 / 219	S6	4000	4000	21.2000	35.1000	25.8		
021	Volkswagen	Eos	2.0 / 121	S6		4000	27.5000	41.5000	32.4		
081	Volkswagen	Golf (TDI)	2.0 / 120	M6		3500	38.7349	59.8800	46.1		
072	Volkswagen	Golf (TDI)	2.0 / 120	S6		3500	39.0620	59.3190	46.2		
026	Volkswagen	Golf	R5 / 151	M5		3500	26.2330	44.2580	32.1		

Ex. 4 - CBI

**Ex. 4 - CBI**

016	Volkswagen	Golf	R5 / 151	S6		3500	27.5817	42.3567	32.7
057	Volkswagen	Golf R	2.0 / 121	M6		3500	23.9000	37.1000	28.5
023	Volkswagen	GTI	2.0 / 121	M6		3500	25.9143	41.0853	31.1
022	Volkswagen	GTI	2.0 / 121	S6		3500	29.8063	43.2768	34.7
100	Volkswagen	Jetta Hybrid	1.4 /	S7		3500	57.5000	65.3000	60.8
087	Volkswagen	Jetta	2.0 / 121	M5		3000	28.8000	46.2000	34.7
086	Volkswagen	Jetta	2.0 / 121	S6		3000	28.1000	41.4990	32.9
080	Volkswagen	Jetta (TDI)	2.0 / 120	M6		3500	38.7349	59.8800	46.1
071	Volkswagen	Jetta (TDI)	2.0 / 120	S6		3500	39.0620	59.3190	46.2
025	Volkswagen	Jetta	R5 / 151	M5		3500	26.2330	44.2580	32.1
015	Volkswagen	Jetta	R5 / 151	S6		3500	27.5817	42.3567	32.7
051	Volkswagen	Jetta [GLI]	2.0 / 121	M6		3500	27.5574	45.1917	33.4
050	Volkswagen	Jetta [GLI]	2.0 / 121	S6		3500	29.5285	44.8437	34.9
079	Volkswagen	Jetta SportWagen (TDI)	2.0 / 120	M6		3500	38.7349	59.8800	46.1
074	Volkswagen	Jetta SportWagen (TDI)	2.0 / 120	S6		3500	37.6000	56.2000	44.2
094	Volkswagen	Beetle (TDI)	2.0 / 120	S6		3500	37.3000	55.3000	43.7
135	Volkswagen	Beetle Convertible (TDI)	2.0 / 120	S6		3500	36.4000	51.9000	42.1
084	Volkswagen	Beetle (TDI)	2.0 / 120	M6		3500	36.0583	57.9748	43.4
085	Volkswagen	Beetle Convertible (TDI)	2.0 / 120	M6		3500	36.0583	57.9748	43.4
024	Volkswagen	Jetta SportWagen	R5 / 151	M5		3500	26.2330	44.2580	32.1
014	Volkswagen	Jetta SportWagen	R5 / 151	S6		3500	27.5817	42.3567	32.7
056	Volkswagen	Tiguan	2.0 / 121	M6		4000	21.7000	35.8000	26.4
068	Volkswagen	Tiguan	2.0 / 121	S6		4000	26.2279	36.8821	30.1
202	Porsche	Boxster	2.7L	A7	3375	3500	27.9000	44.9000	33.6
201	Porsche	Boxster	2.7L	M6	3375	3500	25.9000	41.5000	31.2
222	Porsche	Boxster S	3.4L	A7	3375	3500	26.3000	41.9000	31.6
221	Porsche	Boxster S	3.4L	M6	3375	3500	24.8000	38.5000	29.5
102	Porsche	911 Carrera	3.4L	A7	3500	3500	25.4000	39.5000	30.3
101	Porsche	911 Carrera	3.4L	M7	3500	3500	23.7000	38.2000	28.6
106	Porsche	911 Carrera S	3.8L	A7	3625	3500	24.6000	38.0000	29.2
105	Porsche	911 Carrera S	3.8L	M7	3500	3500	23.8449	37.9484	28.6
110	Porsche	911 Carrera 4	3.4L	A7	3625	3500	25.4965	38.6494	30.1
109	Porsche	911 Carrera 4	3.4L	M7	3625	3500	24.0491	37.8468	28.8
114	Porsche	911 Carrera 4S	3.8L	A7	3750	3500	24.2000	36.7000	28.6
113	Porsche	911 Carrera 4S	3.8L	M7	3625	3500	23.1000	36.9000	27.8
104	Porsche	911 Carrera Cabriolet	3.4L	A7	3625	3500	25.9904	39.4499	30.7
103	Porsche	911 Carrera Cabriolet	3.4L	M7	3625	3500	24.0491	37.9499	28.8
108	Porsche	911 Carrera S Cabriolet	3.8L	A7	3750	3500	23.9000	38.0000	28.7
107	Porsche	911 Carrera S Cabriolet	3.8L	M7	3625	3500	23.6474	37.0494	28.2
112	Porsche	911 Carrera 4 Cabriolet	3.4L	A7	3750	3500	24.9475	37.5494	29.4
111	Porsche	911 Carrera 4 Cabriolet	3.4L	M7	3750	3500	23.5983	36.5997	28.1
116	Porsche	911 Carrera 4S Cabriolet	3.8L	A7	3750	3500	23.3000	36.5000	27.8
115	Porsche	911 Carrera 4S Cabriolet	3.8L	M7	3750	3500	22.9000	36.1000	27.4
90	Porsche	Panamera	3.6L	A7	4250	4000	22.6000	37.3000	27.5
91	Porsche	Panamera 4	3.6L	A7	4500	4500	22.2000	36.5000	27.0
92	Porsche	Panamera S	4.8L	A7	4500	4500	20.2000	33.2000	24.5
93	Porsche	Panamera 4S	4.8L	A7	4500	4500	20.2000	33.2000	24.5
94	Porsche	Panamera GTS	4.8L	A7	4750	4500	19.7000	32.7000	24.0
95	Porsche	Panamera Turbo	4.8L	A7	4750	4500	18.5000	32.0000	22.8
96	Porsche	Panamera Turbo S	4.8L	A7	4750	4500	18.5000	32.0000	22.8
97	Porsche	Panamera Hybrid	3.0L	A8	4750	4500	30.4000	40.9000	34.4
50	Porsche	911 Turbo	3.8L	A7	3875	4000	20.6000	34.3000	25.1
52	Porsche	911 Turbo S	3.8L	A7	3875	4000	20.6000	34.3000	25.1
54	Porsche	911 Turbo	3.8L	M6	3875	4000	20.5000	33.2000	24.8
51	Porsche	911 Turbo Cabriolet	3.8L	A7	4000	4000	19.7489	33.8482	24.3
53	Porsche	911 Turbo S Cabriolet	3.8L	A7	4000	4000	19.7489	33.8482	24.3

AMFA unadj unrounded with FFV (MPG)

AMFA adjusted unrounded with FFV (MPG)

AMFA adjusted rounded with FFV (MPG)

## 2013 VWGoA Import Passenger Car Reformulated Standard

Brand	Carline	Carline Code	FootPrint Index #	FOOTPRINT	2013 MPG Target	Sales	MPG Weighted Sales/Target
Audi	A3	65		41.9	36.17		
Audi	A3 quattro	66		41.9	36.17		
Audi	A4	10		46.5	33.23		
Audi	A4 quattro	20		46.5	33.23		
Audi	A5 Cabriolet	51		46.8	33.06		
Audi	A5 Cabriolet quattro	53		46.8	33.06		
Audi	A5 quattro	40		46.8	33.06		
Audi	A6	80		50.7	30.94		
Audi	A6 quattro	75		50.7	30.94		
Audi	A7 quattro	70		51.3	30.64		
Audi	A8	95		52.6	30.00		
Audi	A8L	96	1	54.9	28.94		
Audi	A8L	96	2	55.2	28.81		
Audi	allroad quattro	26		47.8	32.49		
Audi	RSS	43		47.3	32.77		
Audi	RSS Cabriolet	52		47.3	32.77		
Audi	S4	30		46.7	33.11		
Audi	S5	42		46.8	33.06		
Audi	S5 Cabriolet	56		46.8	33.06		
Audi	S6	76		50.3	31.14		
Audi	S7	72		51.3	30.64		
Audi	S8	97		52.6	30.00		
Audi	TT Coupe quattro	37	1	41.1	36.73		
Audi	TT(S) Coupe quattro	37	2	41.1	36.73		
Audi	TT Roadster quattro	38	1	41.1	36.73		
Audi	TT(S) Roadster quattro	38	2	41.1	36.73		
Audi	TTRS Coupe	61		41.1	36.73		
Bentley	Continental Flying Spur	40		53.3	29.67		
Bentley	Continlant GT	35		49.2	31.72		
Bentley	Continental GTC	45		49.2	31.72		
Bentley	Mulsanne	15		56.9	28.46		
Bentley	Supersports Convertible	55		48.5	32.10		
Bugatti	Veyron	500		48.8	31.94		
Lamborghini	Aventador Coupe	475		49.7	31.46		
Lamborghini	Aventador Roadster	476		49.7	31.46		
Lamborghini	Gallardo Coupe	406		44.5	34.45		
Lamborghini	Gallardo Spyder	426		44.5	34.45		
Porsche	911 Carrera	501		40.3	36.80		
Porsche	911 Carrera 4	505		40.3	36.80		
Porsche	911 Carrera 4 Cabriolet	506		40.3	36.80		
Porsche	911 Carrera 4S	507		40.3	36.80		

**Ex. 4 - CBI**

Model	Vehicle Type	MPG	City MPG	Hwy MPG	Fuel Type
Porsche	911 Carrera 4S Cabriolet	508		40.3	36.80
Porsche	911 Carrera Cabriolet	502		40.3	36.80
Porsche	911 Carrera S	503		40.3	36.80
Porsche	911 Carrera S Cabriolet	504		40.3	36.80
Porsche	911 Turbo	930		38.4	36.80
Porsche	911 Turbo Cabriolet	931		38.4	36.80
Porsche	911 Turbo S	932		38.4	36.80
Porsche	911 Turbo S Cabriolet	933		38.4	36.80
Porsche	Boxster	860		39.9	36.80
Porsche	Boxster S	861		39.9	36.80
Porsche	Panamera	600		52.2	30.20
Porsche	Panamera 4	604		52.2	30.20
Porsche	Panamera 4S	602		52.2	30.20
Porsche	Panamera GTS	606		52.2	30.20
Porsche	Panamera Hybrid	607		52.2	30.20
Porsche	Panamera S	601		52.2	30.20
Porsche	Panamera Turbo	603		51.9	30.34
Porsche	Panamera Turbo S	605		51.9	30.34
Volkswagen	Beetle	230	1	42.7	35.62
Volkswagen	Beetle	230	2	42.5	35.75
Volkswagen	Beetle Convertible	235	1	42.7	35.62
Volkswagen	Beetle Convertible	235	2	42.5	35.75
Volkswagen	CC	293	1	45.3	33.95
Volkswagen	CC	293	2	45.3	33.95
Volkswagen	CC 4MOTION	298		45.3	33.95
Volkswagen	Eos	216		42.9	35.48
Volkswagen	Golf	206	1	42.4	35.82
Volkswagen	Golf [TDI]	206	2	42.0	36.10
Volkswagen	Golf R	212		42.3	35.89
Volkswagen	GTI	211		42.3	35.89
Volkswagen	Jetta	221	1	43.8	34.89
Volkswagen	Jetta	221	2	43.8	34.89
Volkswagen	Jetta [TDI]	221	2	43.8	34.89
Volkswagen	Jetta [GLI]	221	3	43.5	35.09
Volkswagen	Jetta Hybrid	222		44.1	34.70
Volkswagen	Jetta SportWagen	225		42.3	35.89
Volkswagen	Jetta SportWagen [TDI]	225		42.3	35.89
Volkswagen	Tiguan	160	1	44.0	34.76
Volkswagen	Tiguan	160	2	43.4	35.15

## **Ex. 4 - CBI**

### Unrounded CAFE Standard Rounded CAFE Standard

34.3760  
34.4

## 2013 VWGoA Domestic Passenger Car CAFE

INDEX #	Brand	Carline	Engine	DISP	Trans	CITY	HWY	COMB Round
64	Volkswagen	Passat	2.0L TDI	2.0 / 121	M6	38.2000	62.8000	46.4
62	Volkswagen	Passat	2.0L TDI	2.0 / 121	S6	37.9000	56.8000	44.6
63	Volkswagen	Passat	3.6L VR6 FSI	3.6 / 219	S6	23.9000	37.3000	28.5
82	Volkswagen	Passat	R5 2.5L SRE	R5 / 151	M5	26.2264	43.3511	31.9
83	Volkswagen	Passat	R5 2.5L SRE	R5 / 151	S6	26.9188	40.6076	31.7

VOLKSWAGEN GROUP Total Projected Units	
Baseline unadj unrounded (MPG)	34.7484
Baseline adj unrounded (MPG)	34.9914
Baseline adj rounded (MPG)	35.0

**Ex. 4 - CBI**

## 2013 VWGoA Domestic Passenger Car Reformulated Standard

Brand	Carline	FOOTPRINT INDEX	FOOTPRINT	2013 MPG Target	Sales	Weighted Sales/Target
Volkswagen	Passat	1	47.2	32.83		
Volkswagen	Passat	2	47.2	32.83		
Volkswagen	Passat	3	46.9	33.00		
Total Projected Units						
Unround CAFE Standard						
VWGoA CAFE Standard						

**Ex. 4 - CBI**

# 2013 Final VWGoA Passenger Car GHG Fleet Average

Brand	Carline	Engine	Trans	Model Type Sales	CREE	CREE FFV	CO2 Target	WGT CREE	WGT FFV	WGT CO2 Target
Audi	A3	2.0L TDI	S6	1,834	221	221	241.1	405,314	405,314	442,177.4
Audi	A3	2.0L TFSI	M6	118	292	292	241.1	34,456	34,456	28,449.8
Audi	A3	2.0L TFSI	S6	855	289	289	241.1	247,095	247,095	206,140.5
Audi	A3 quattro	2.0L TFSI	S6	912	287	287	241.1	261,744	261,744	219,883.2
Audi	A4	2.0L TFSI	AV	8,671	252	252	262.8	2,185,092	2,185,092	2,278,738.8
Audi	A4 quattro	2.0L TFSI	M6	2,370	268	268	262.8	635,160	635,160	622,836.0
Audi	A4 quattro	2.0L TFSI	S8	6,840	292	292	262.8	1,997,280	1,997,280	1,797,552.0
Audi	A4 quattro	2.0L TFSI	S8	15,537	292	174	262.8	4,536,804	2,703,438	4,083,123.6
Audi	A5 Cabriolet	2.0L TFSI	AV	1,067	252	252	264.2	268,884	268,884	281,901.4
Audi	A5 Cabriolet quattro	2.0L TFSI	S8	1,556	292	292	264.2	454,352	454,352	411,095.2
Audi	A5 Cabriolet quattro	2.0L TFSI	S8	3,083	292	166	264.2	900,236	511,778	814,528.6
Audi	A5 quattro	2.0L TFSI	M6	864	268	268	264.2	231,552	231,552	228,268.8
Audi	A5 quattro	2.0L TFSI	S8	2,434	292	292	264.2	710,728	710,728	643,062.8
Audi	A5 quattro	2.0L TFSI	S8	5,517	292	166	264.2	1,610,964	915,822	1,457,591.4
Audi	A6	2.0L TFSI	S8	2,129	241	241	282.6	513,089	513,089	601,655.4
Audi	A6 quattro	2.0L TFSI	S8	7,151	292	292	282.6	2,088,092	2,088,092	2,020,872.6
Audi	A6 quattro	3.0L TFSI	S8	9,988	318	318	282.6	3,176,184	3,176,184	2,822,608.8
Audi	A7 quattro	3.0L TFSI	S8	6,626	329	329	285.4	2,179,954	2,179,954	1,891,060.4
Audi	A8	3.0L V8 FSI	S8	1,018	329	329	291.6	334,922	334,922	296,848.8
Audi	A8	4.0L V8 TSI	S8	361	331	331	291.6	119,491	119,491	105,267.6
Audi	A8L	3.0L V8 FSI	S8	2,530	329	329	302.4	832,370	832,370	765,072.0
Audi	A8L	4.0L V8 TSI	S8	78	366	366	302.4	28,548	28,548	23,587.2
Audi	A8L	6.3L W12	S8	1,648	464	464	303.8	764,672	764,672	500,662.4
Audi	allroad quattro	2.0L TFSI	S8	2,141	301	301	268.9	644,441	644,441	575,714.9
Audi	allroad quattro	2.0L TFSI	S8	4,825	301	174	268.9	1,452,325	839,550	1,297,442.5
Audi	RS5	4.2L V8 FSI	S7	1,453	390	390	266.6	566,670	566,670	387,369.8
Audi	RS5 Cabriolet	4.2L V8 FSI	S7	92	394	394	266.6	36,248	36,248	24,527.2
Audi	S4	3.0L TFSI	M6	1,434	366	366	263.7	524,844	524,844	378,145.8
Audi	S4	3.0L TFSI	S7	4,902	332	332	263.7	1,627,464	1,627,464	1,292,657.4
Audi	S5	3.0L TFSI	M6	838	366	366	264.2	306,708	306,708	221,399.6
Audi	S5	3.0L TFSI	S6	3,085	332	332	264.2	1,024,220	1,024,220	815,057.0
Audi	S5 Cabriolet	3.0L TFSI	S7	1,828	338	338	264.2	617,864	617,864	482,957.6
Audi	S6	4.0L V8 TSI	S7	1,809	352	352	280.7	636,768	636,768	507,786.3
Audi	S7	4.0L V8 TSI	S7	1,106	352	352	285.4	389,312	389,312	315,652.4
Audi	S8	4.0L V8 TSI	S8	1,015	379	379	291.6	384,685	384,685	295,974.0
Audi	TT Coupe quattro	2.0L TFSI	S6	1,185	275	275	237.3	325,875	325,875	281,200.5
Audi	TT Roadster quattro	2.0L TFSI	S6	500	275	275	237.3	137,500	137,500	118,650.0
Audi	TTRS Coupe	2.5L T	M6	507	349	349	237.3	176,943	176,943	120,311.1
Bentley	Continental Flying Spur	6.0L W12	S6	192	520	299	294.9	99,840	57,408	56,620.8
Bentley	Continental GT	4.0L	S6	546	378	378	275.5	206,388	206,388	150,423.0
Bentley	Continental GT	6.0L W12	S6	50	514	294	275.5	25,700	14,700	13,775.0
Bentley	Continental GT	6.0L W12	S8	474	459	280	275.5	217,566	132,720	130,587.0
Bentley	Continental GTC	4.0L	S6	783	412	412	275.5	322,596	322,596	215,716.5
Bentley	Continental GTC	6.0L W12	S6	435	520	299	275.5	226,200	130,065	119,842.5
Bentley	Continental GTC	6.0L W12	S8	218	490	280	275.5	106,820	61,040	60,059.0
Bentley	Mulsanne	6.8L V8	S8	234	564	564	307.0	131,976	131,976	71,838.0
Bentley	Supersports Convertible	6.0L W12	S6	15	514	294	272.2	7,710	4,410	4,083.0
Bugatti	Veyron	V16	L7	6	710	710	273.6	4,260	4,260	1,641.6
Lamborghini	Aventador Coupe	6.5L V12	S7	124	547	547	277.9	67,828	67,828	34,459.6
Lamborghini	Aventador Roadster	6.5L V12	S7	31	614	614	277.9	19,034	19,034	8,614.9
Lamborghini	Gallardo Coupe	5.2L	M6	16	518	518	253.3	8,288	8,288	4,052.8
Lamborghini	Gallardo Coupe	5.2L	S6	249	463	463	253.3	115,287	115,287	63,071.7
Lamborghini	Gallardo Spyder	5.2L	M6	2	553	553	253.3	1,106	1,106	506.6
Lamborghini	Gallardo Spyder	5.2L	S6	182	464	464	253.3	84,448	84,448	46,100.6
Volkswagen	Beetle	2.0L TFSI	M	1,141	282	282	243.9	321,762	321,762	278,289.9
Volkswagen	Beetle	2.0L TFSI	S6	5,213	276	276	243.9	1,438,788	1,438,788	1,271,450.7
Volkswagen	Beetle	R5 2.5L SRE	M5	1,512	278	278	244.4	420,336	420,336	369,532.8
Volkswagen	Beetle	R5 2.5L SRE	S6	15,528	282	282	263.3	4,378,896	4,378,896	4,088,522.4
Volkswagen	Beetle [TDI]	2.0L TDI	M6	696	235	235	244.8	163,560	163,560	170,380.8
Volkswagen	Beetle [TDI]	2.0L TDI	S6	3,138	234	234	244.8	734,292	734,292	768,182.4

# 2013 Final VWGoA Passenger Car GHG Fleet Average

Volkswagen	Beetle Convertible	2.0L TFSI	M6	876	282	282	243.9	247,032	247,032	213,656.4	
Volkswagen	Beetle Convertible	2.0L TFSI	S6	4,424	276	276	243.9	1,221,024	1,221,024	1,079,013.6	
Volkswagen	Beetle Convertible	RS 2.5L SRE	S6	12,570	291	291	244.4	3,657,870	3,657,870	3,072,108.0	
Volkswagen	Beetle Convertible [TDI]	2.0L TDI	M6	496	235	235	244.8	116,560	116,560	121,420.8	
Volkswagen	Beetle Convertible [TDI]	2.0L TDI	S6	2,182	243	243	244.8	530,226	530,226	534,153.6	
Volkswagen	CC	2.0L TFSI	M6	1,863	281	281	257.1	523,503	523,503	478,977.3	
Volkswagen	CC	2.0L TFSI	S6	28,595	273	273	257.1	7,806,435	7,806,435	7,351,774.5	
Volkswagen	CC	3.6L VR6 FSI	S6	726	345	345	257.1	250,470	250,470	186,654.6	
Volkswagen	CC 4MOTION	3.6L VR6 FSI	S6	1,073	358	358	257.1	384,134	384,134	275,868.3	
Volkswagen	Eos	2.0L TFSI	S6	4,775	272	272	245.8	1,298,800	1,298,800	1,173,695.0	
Volkswagen	Golf 2 dr [TDI]	2.0L TDI	M6	2,756	222	222	241.5	611,832	611,832	665,574.0	
Volkswagen	Golf 2 dr [TDI]	2.0L TDI	S6	5,884	221	221	241.5	1,300,364	1,300,364	1,420,986.0	
Volkswagen	Golf 2 dr	RS 2.5L SRE	M5	827	276	276	243.4	228,252	228,252	201,291.8	
Volkswagen	Golf 2dr	RS 2.5L SRE	S6	1,163	271	271	243.4	315,173	315,173	283,074.2	
Volkswagen	Golf 4 dr	RS 2.5L SRE	S6	8,115	271	271	243.4	2,199,165	2,199,165	1,975,191.0	
Volkswagen	Golf R	2.0L TFSI	M6	2,710	313	313	243.0	848,230	848,230	658,530.0	
Volkswagen	GTI	2.0L TFSI	M6	6,021	286	286	243.0	1,722,006	1,722,006	1,463,103.0	
Volkswagen	GTI	2.0L TFSI	S6	11,152	255	255	243.0	2,843,760	2,843,760	2,709,936.0	
Volkswagen	Jetta	2.0 MPI	M5	4,295	256	256	250.0	1,099,520	1,099,520	1,073,750.0	
Volkswagen	Jetta	2.0 MPI	S6	23,516	270	270	250.0	6,349,320	6,349,320	5,879,000.0	
Volkswagen	Jetta	RS 2.5L SRE	M5	4,045	276	276	250.0	1,116,420	1,116,420	1,011,250.0	
Volkswagen	Jetta	RS 2.5L SRE	S6	70,701	271	271	250.0	19,159,971	19,159,971	17,675,250.0	
Volkswagen	Jetta [GLI]	2.0L TFSI	M6	2,863	267	267	248.6	764,421	764,421	711,741.8	
Volkswagen	Jetta [GLI]	2.0L TFSI	S6	6,662	255	255	248.6	1,698,810	1,698,810	1,656,173.2	
Volkswagen	Jetta [TDI]	2.0L TDI	M6	5,190	222	222	250.0	1,152,180	1,152,180	1,297,500.0	
Volkswagen	Jetta [TDI]	2.0L TDI	S6	24,991	221	221	250.0	5,523,011	5,523,011	6,247,750.0	
Volkswagen	Jetta Hybrid	1.4L	S6	6,067	146	146	251.5	885,782	885,782	1,525,850.5	
Volkswagen	Jetta SportWagen	RS 2.5L SRE	M5	411	276	276	243.0	113,436	113,436	99,873.0	
Volkswagen	Jetta SportWagen	RS 2.5L SRE	S6	7,221	271	271	243.0	1,956,891	1,956,891	1,754,703.0	
Volkswagen	Jetta SportWagen [TDI]	2.0L TDI	M6	4,329	222	222	243.0	961,038	961,038	1,051,947.0	
Volkswagen	Jetta SportWagen [TDI]	2.0L TDI	S6	15,839	231	231	243.0	3,658,809	3,658,809	3,848,877.0	
Volkswagen	Passat	3.6L VR6 FSI	S6	3,189	312	312	264.7	994,968	994,968	844,128.3	
Volkswagen	Passat	RS 2.5L SRE	M5	1,887	278	278	266.1	524,586	524,586	502,130.7	
Volkswagen	Passat	RS 2.5L SRE	S6	83,869	280	280	266.1	23,483,320	23,483,320	22,317,540.9	
Volkswagen	Passat [TDI]	2.0L TDI	M6	3,326	219	219	266.1	728,394	728,394	885,048.6	
Volkswagen	Passat [TDI]	2.0L TDI	S6	36,660	228	228	266.1	8,358,480	8,358,480	9,755,226.0	
Volkswagen	Tiguan	2.0L TFSI	M6	165	336	336	251.0	55,440	55,440	41,415.0	
Volkswagen	Tiguan	2.0L TFSI	S6	17,322	295	295	251.0	5,109,990	5,109,990	4,347,822.0	
559,448						152,271,154		148,457,920		143,977,567.5	

2013 PC Fleet Average Standard (g/mi)	257
2013 PC Fleet Average (g/mi)	272
Final Capped 2013 PC Fleet Average w/ FFV(g/mi)	265

Brand	Carline	ETRN	TRUPP	AXLE RATIO	ENG CODE	Trans	TransConfig	GREG	In-Use GREG	Basic Eng.	Target Coefficient A	Target Coefficient B	Target Coefficient C	Set Coefficient A	Set Coefficient B	Set Coefficient C
Audi	A3	3625	12.7	3.94	CEFA	M6	10	292	321	D3PA	30.00	0.2000	0.0386	-22.0000	0.0400	0.0186
Audi	A3	3750	12.8	4.06	CEFA	S6	13	289	318	D3PA	32.00	0.2700	0.0200	-16.0000	0.1300	0.0201
Audi	A3 [TDI]	3750	10.9	3.04	CREA	S6	8	221	243	DUSN	29.00	0.2300	0.0168	-13.0000	0.0790	0.0169
Audi	A3 quattro	3875	12.8	3.136	CCTA	S6	20	287	316	D3UA	34.00	0.3500	0.0178	-11.0000	0.1400	0.0182
Audi	A4	3875	12.3	4.61	CAEB	AV	37	252	277	D3UB	36.64	0.2424	0.0173	-1.1020	0.2874	0.0158
Audi	A4 quattro	4000	12.9	3.69	CAEB	M6	4	268	295	D4UB	36.19	0.3292	0.0176	3.9340	-0.0450	0.0195
Audi	A4 quattro	4000	13.7	2.85	CPMA	S8	29	292	321	D4UB	36.87	0.4449	0.0174	0.0900	0.5281	0.0155
Audi	A4 quattro [FFV]	4250	15.0	2.85	CAEB	S8	29	166	183	DFUB	36.87	0.4449	0.0174	0.0900	0.5281	0.0155
Audi	A5 Cabriolet	4250	13.1	2.51	CAEB	AV	37	252	277	D3UB	36.64	0.2424	0.0173	-1.1020	0.2874	0.0158
Audi	A5 Cabriolet quattro	4250	15.0	2.85	CPMA	S8	4	292	321	D4UB	36.87	0.4449	0.0174	0.0900	0.5281	0.0155
Audi	A5 Cabriolet quattro [FFV]	4250	15.0	2.85	CPMA	S8	4	166	183	DFUB	36.87	0.4449	0.0174	0.0900	0.5281	0.0155
Audi	A5 quattro	3875	12.9	3.69	CAEB	M6	29	268	295	D4UB	36.19	0.3292	0.0176	3.9340	-0.0450	0.0195
Audi	A5 quattro	4000	13.7	2.85	CPMA	S8	4	292	321	D4UB	36.87	0.4449	0.0174	0.0900	0.5281	0.0155
Audi	A5 quattro [FFV]	4000	13.7	2.85	CPMA	S8	4	166	183	DFUB	36.87	0.4449	0.0174	0.0900	0.5281	0.0155
Audi	A6	4000	11.4	4.92	CAEB	S8	37	241	265	D3UB	36.19	0.1555	0.0167	2.3380	0.2821	0.0148
Audi	A6 quattro	4000	11.4	4.92	CAEB	S8	15	292	321	D3UB	34.40	0.4304	0.0175	-10.3410	0.3002	0.0165
Audi	A6 quattro	4250	13.5	3.204	CTUA	S8	15	318	350	D3UF	35.745	0.43044	0.01746	9.464	0.37112	0.01682
Audi	A7 quattro	4500	13.5	2.85	CTUA	S8	15	329	362	D3UF	35.75	0.4304	0.0175	12.2750	0.3870	0.0166
Audi	A8	5000	14.3	3.2	CEUA	S8	15	331	364	D3UJ	40.92	0.2539	0.0176	8.2950	0.3364	0.0151
Audi	A8	4750	12.9	3.2	CTUB	S8	15	329	362	D3UF	48.11	0.3979	0.0158	-1.3710	0.2170	0.0146
Audi	A8L	4750	13.0	3.2	CTUB	S8	15	329	362	D3UF	40.915	0.25393	0.017577	8.295	0.3364	0.015074
Audi	A8L	5250	15.3	3.09	CEJA	S8	11	464	510	DUA8	50.13	0.3979	0.0179	15.7140	0.4028	0.0165
Audi	A8L	5000	14.3	3.2	CEUA	S8	15	366	403	D3UJ	48.11	0.3979	0.0158	-1.3710	0.2170	0.0146
Audi	allroad quattro	4250	14.9	3.08	CPMA	S8	9	301	331	D4UB	39.12	0.4666	0.0198	2.5400	0.4634	0.0192
Audi	allroad quattro [FFV]	4250	14.9	3.08	CPMA	S8	9	174	191	DFUB	39.12	0.4666	0.0198	2.5400	0.4634	0.0192
Audi	R8S	4250	14.3	4.38	CFS	S7	36	380	429	D3UL	46.09	0.3473	0.0174	-13.7580	0.1979	0.0168
Audi	R8S Cabriolet	4750	15.4	4.38	CFS	S7	36	394	433	D3UL	47.21	0.3473	0.0205	-15.4890	0.2769	0.0186
Audi	S4	4250	13.2	3.68	CGXC	M6	27	366	403	D3UF	40.915	0.31469	0.016995	20.008	-0.0144	0.018217
Audi	S4	4250	13.5	3.88	CGXC	S7	33	332	365	D3UF	41.59	0.34725	0.01682	1.012	0.40512	0.015481
Audi	SS	4250	13.2	3.62	CGXC	M6	27	366	403	D3UF	40.92	0.3147	0.0170	20.0080	-0.0144	0.0182
Audi	SS	4250	15.2	3.87	CGXC	S6	33	332	365	D3UF	41.59	0.3473	0.0168	1.0120	0.4051	0.0155
Audi	SS Cabriolet	4750	14.7	3.88	CGXC	S7	33	338	372	D3UF	45.64	0.3436	0.0187	5.2830	0.2026	0.0194
Audi	SS	4750	14.1	4.09	CEUC	S7	35	352	387	D3UJ	43.16	0.3617	0.0178	-15.7820	0.2865	0.0154
Audi	S7	4750	14.5	4.09	CEUC	S7	35	352	387	D3UJ	44.962	0.26895	0.018217	9.442	-0.434	0.021825
Audi	S8	5000	14.4	3.2	CGTA	S8	15	379	417	D3UJ	47.44	0.3979	0.0164	-7.040	0.3031	0.0143
Audi	TT Coupe quattro	3500	12.7	3.444	CETA	S6	20	275	303	D3UA	36.00	0.3540	0.0167	1.0000	0.0830	0.0169
Audi	TT Coupe quattro [TTS]	3285	12.7	3.444	CDMA	S6	20	275	303	D3UA	37	0.35	0.0164	14	0.14	0.0169
Audi	TT Roadster quattro	3625	13.2	3.444	CETA	S6	20	275	303	D3UA	37.00	0.3540	0.0176	3.0000	0.1090	0.0178
Audi	TT Roadster quattro [TTS]	3428	18.1	3.444	CDMA	S6	20	275	303	D3UA	38	0.35	0.0174	16	0.13	0.0181
Audi	TTRS Coupe	3625	13.9	2.91	CEPB	M6	6	349	384	D3UK	39.34	0.2884	0.0202	17.4900	0.0266	0.0215

Bentley	Continental Flying Spur	6000	15.1	3.53 CKH-D	S6	23	520	572	D501	49.70	0.2604	0.0202	10.1000	-0.0720	0.0214
Bentley	Continental GT	5500	16.1	2.85 CMMA	S6	4	378	416	D3UJ	54.85	0.0488	0.0221	-6.2050	-0.0803	0.0193
Bentley	Continental GT	5500	16.1	3.53 CKH-D	S6	23	514	565	D501	49.70	0.2604	0.0202	10.1000	-0.0720	0.0214
Bentley	Continental GT	5500	16.1	3.53 CKH-D	S8	23	459	505	D4UC	52.16	0.0488	0.0214	-9.6880	-0.0575	0.0185
Bentley	Continental GTC	6000	15.0	2.85 CMMA	S6	4	412	453	D3UJ	54.853	0.04883	0.022116	-6.205	-0.0803	0.0193323
Bentley	Continental GTC	6000	16.1	3.53 CKH-B	S6	23	520	572	D501	49.70	0.2604	0.0202	10.1000	-0.0720	0.0214
Bentley	Continental GT	6000	16.1	3.53 CKH-B	S8	23	490	539	D4UC	54.85	0.0488	0.0221	7.6140	-0.0083	0.0209
Bentley	Mulsanne	6500	18.0	2.92 CBK	S8	8	564	620	D4LA	69.92	0.1302	0.0210	20.7000	0.4449	0.0158
Bentley	Supersports Convertible	5500	15.1	3.53 CKHA	S6	23	514	565	D501	49.7	0.2604	0.0202	10.1	-0.072	0.02136
Bugatti	Veyron	4750	18.1	2.59 CBLA (1200H)I7	2	710	781	DV16	60	0.59	0.0185	16	0.022	0.0204	
Lamborghini	Aventador Coupe	40000	12.0	2.87 L539	S7	5	547	602	D183	33.72	0.0174	0.0221	6.3620	-0.4485	0.0240
Lamborghini	Aventador Roadster	42500	13.4	2.87 L539	S7	5	614	675	D183	40.92	0.0181	0.0233	10.8360	-0.5606	0.0261
Lamborghini	Gallardo Coupe	3750	12.1	4.06 CEH	M6	29	518	570	DLR8	41.81	0.3150	0.0169	15.6700	0.0029	0.0183
Lamborghini	Gallardo Coupe	3625	12.3	4.06 CEH	S6	30	463	509	DLR8	41.81	0.3150	0.0169	11.1700	-0.1085	0.0194
Lamborghini	Gallardo Spyder	3875	12.1	4.06 CEH	M6	29	553	608	DLR8	43.84	0.3180	0.0175	16.6600	-0.0998	0.0203
Lamborghini	Gallardo Spyder	3875	12.1	4.06 CEH	S6	30	464	510	DLR8	43.84	0.3180	0.0175	8.6100	-0.0633	0.0197
Volkswagen	Beetle	3375	12.4	3.087 CPLA	M	10	282	310	DB5F	29	0.14469	0.02264	16.6356	-0.0704	0.022849
Volkswagen	Beetle	3375	12.4	3.09 CBFA	M	10	282	310	D3PA	31.70	0.1338	0.0218	19.3110	-0.0864	0.0221
Volkswagen	Beetle	3375	12.4	3.087 CCTA	M	10	282	310	D3UA	31.70	0.1338	0.0218	19.9630	-0.1052	0.0227
Volkswagen	Beetle	3375	11.8	3.64 CBTA-M	M5	26	278	306	DU3M	28.10	0.1338	0.0216	10.1160	0.0253	0.0216
Volkswagen	Beetle	3375	11.8	3.65 CBTA-M	M5	26	278	306	DM59	28.10	0.1338	0.0216	12.4140	0.0417	0.0211
Volkswagen	Beetle	3500	13.1	4.14 CPLA	S6	10	276	304	DBSF	29.00	0.1447	0.0226	17.0850	-0.0481	0.0223
Volkswagen	Beetle	3500	13.1	4.14 CBFA	S6	10	276	304	D3PA	32.15	0.2894	0.0206	8.0930	0.2496	0.0207
Volkswagen	Beetle	3500	13.1	3.136 CCTA	S6	14	276	304	D3UA	32.15	0.2894	0.0206	6.9690	0.2167	0.0207
Volkswagen	Beetle	3375	12.7	3.5 CBTA-M	S6	22	282	310	DU3A	28.10	0.2930	0.0210	1.7980	0.4656	0.0180
Volkswagen	Beetle	3375	12.7	3.5 CBUA-M	S6	22	282	310	DA59	28.10	0.2930	0.0210	2.2480	0.1302	0.0210
Volkswagen	Beetle [TDI]	3375	12.2	2.917 CIAA	M6	7	235	259	DUSN	31.70	0.1338	0.0218	19.9630	-0.1052	0.0227
Volkswagen	Beetle [TDI]	3375	12.2	3.04 CIAA	S6	8	234	257	DUSN	29.23	0.2532	0.0207	7.5760	0.1827	0.0203
Volkswagen	Beetle Convertible	3625	12.8	3.09 CPLA	M6	10	282	310	DBSF	30.57	0.1447	0.0233	14.8370	-0.0561	0.0235
Volkswagen	Beetle Convertible	3625	12.8	3.09 CCTA	M6	10	282	310	D3UA	31.70	0.1338	0.0218	19.9630	-0.1052	0.0227
Volkswagen	Beetle Convertible	3625	12.8	3.09 CBFA	M6	10	282	310	D3PA	37.32	0.0615	0.0233	15.5120	0.2000	0.0214
Volkswagen	Beetle Convertible	3625	13.5	3.09 CPLA	S6	10	276	304	DB5F	35.75	0.0615	0.0226	13.7130	0.0541	0.0225
Volkswagen	Beetle Convertible	3625	13.5	3.09 CBFA	S6	10	276	304	D3PA	33.27	0.2894	0.0214	9.8920	0.1736	0.0221
Volkswagen	Beetle Convertible	3625	13.5	3.14 CCTA	S6	14	276	304	D3UA	33.27	0.2894	0.0214	8.3180	0.0398	0.0222
Volkswagen	Beetle Convertible	3500	13.1	3.5 CBUA-M	S6	22	291	320	DA59	30.12	0.2930	0.0212	-8.5650	0.0695	0.0222
Volkswagen	Beetle Convertible	3500	13.1	3.5 CBTA-M	S6	22	291	320	DUSN	28.10	0.2930	0.0210	1.7980	0.4666	0.0180
Volkswagen	Beetle Convertible [TDI]	3625	12.4	2.92 CIAA	M6	3	235	259	DUSN	33.05	0.1338	0.0226	14.3880	-0.1368	0.0240
Volkswagen	Beetle Convertible [TDI]	3625	12.4	3.04 CIAA	S6	8	243	267	DUSN	30.80	0.2532	0.0212	10.8810	0.1837	0.0212
Volkswagen	CC	3625	12.5	2.917 CBFA	M6	6	281	309	D3PA	33.72	0.1338	0.0179	9.4420	0.0398	0.0175
Volkswagen	CC	3625	12.5	2.087 CCTA	M6	1	281	309	D3UA	34.00	0.1300	0.0179	6.0000	-0.1300	0.0195
Volkswagen	CC	4250	14.4	3.45 BLV	S6	20	345	380	DU46	42	0.47	0.017	0	0.38	0.017
Volkswagen	CC	3625	12.2	3.14 CBFA	S6	14	273	300	D3PA	36.00	0.2500	0.0165	14.0000	0.2700	0.0158
Volkswagen	CC	3625	12.2	3.14 CCTA	S6	12	273	300	D3UA	36.00	0.2500	0.0165	21.0000	0.1230	0.0185

Volkswagen	CC 4MOTION	4250	14.4	3.81	BLV	\$6	32	358	394	DU46	42	0.47	0.017	0	0.38	0.017
Volkswagen	Eos	3875	12.8	3.136	CBFA	\$6	14	272	299	D3UA	39.00	0.2900	0.0171	18.0000	0.1000	0.0178
Volkswagen	Golf 2 dr [TDI]	3375	10.9	2.76	CJAA	M6	3	222	244	DUSN	30.00	0.1300	0.0181	14.0000	-0.2060	0.0199
Volkswagen	Golf 2 dr [TDI]	3375	10.9	3.04	CJAA	\$6	8	221	243	DUSN	29.00	0.2100	0.0168	13.0000	-0.0190	0.0178
Volkswagen	Golf 2 dr	3375	12.1	3.39	CBUA-M	M5	19	276	304	DM59	31	0.134	0.0178	6	0.098	0.0172
Volkswagen	Golf 2 dr	3375	12.1	3.5	CBUA-M	\$6	22	271	298	DA59	33.00	0.2930	0.0171	-2.0000	0.2030	0.0176
Volkswagen	Golf 2dr	3375	12.1	3.5	CBTA-M	\$6	22	271	298	DUSA	33.00	0.2930	0.0171	-2.0000	0.2030	0.0176
Volkswagen	Golf 4 dr	3500	12.1	3.5	CBTA-M	\$6	22	271	298	DUSA	33.00	0.2930	0.0171	-2.0000	0.2030	0.0176
Volkswagen	Golf 4 dr	3375	12.1	3.39	CBUA-M	\$6	22	271	298	DA59	33.00	0.2930	0.0171	-2.0000	0.2030	0.0176
Volkswagen	Golf R	3625	13.6	3.273	CRZA	M6	17	313	344	D3UA	30	0.2	0.0186	12	0.04	0.0186
Volkswagen	GTI	3375	11.5	3.09	CBFA	M6	10	286	315	D3PA	29.00	0.2050	0.0168	8.0000	0.0470	0.0171
Volkswagen	GTI	3375	11.5	3.087	CCCTA	M6	10	286	315	D3UA	30.00	0.2090	0.0186	12.0000	0.0400	0.0186
Volkswagen	GTI	3375	10.8	3.14	CBFA	\$6	13	255	281	D3PA	29.00	0.2050	0.0168	11.0000	0.0470	0.0171
Volkswagen	GTI	3375	10.8	3.136	CCCTA	\$6	13	255	281	D3UA	29.00	0.2050	0.0168	8.0000	0.0470	0.0171
Volkswagen	Jetta	3250	10.1	3.93	CEPA	M5	34	256	282	DU36	27.00	0.1340	0.0168	-1.0000	0.0610	0.0168
Volkswagen	Jetta	3375	12.1	3.39	CBTA-M	M5	19	276	304	D3M	31	0.134	0.0178	10	0.365	0.0149
Volkswagen	Jetta	3500	12.1	3.39	CBUA-M	M5	19	276	304	DM59	31.00	0.1340	0.0178	10.0000	0.3650	0.0149
Volkswagen	Jetta	3250	11.5	3.68	CEPA	\$6	28	270	297	DU36	28.00	0.5060	0.0131	5.0000	0.4210	0.0132
Volkswagen	Jetta	3500	12.1	3.5	CBTA-M	\$6	22	271	298	DA59	33	0.293	0.0171	-2	0.203	0.0176
Volkswagen	Jetta	3500	12.1	3.5	CBUA-M	\$6	22	271	298	D3A	28.551	0.20546	0.016762	2.585	0.05968	0.016878
Volkswagen	Jetta [GL]	3500	11.5	2.92	CPLA	M6	6	267	294	DBSF	34.17	0.1447	0.0184	16.6360	-0.0824	0.0191
Volkswagen	Jetta [GL]	3375	10.1	2.917	CBFA	M6	6	267	294	D3PA	34.17	0.1447	0.0184	14.8820	-0.0853	0.0196
Volkswagen	Jetta [GL]	3500	11.5	2.92	CCCTA	M6	6	267	294	DUSA	30.124	0.19533	0.018566	14.77	-0.052	0.019264
Volkswagen	Jetta [GL]	3500	10.8	3.14	CPLA	\$6	14	255	281	D85F	40.69	0.0615	0.0184	22.6610	-0.0028	0.0182
Volkswagen	Jetta [GL]	3500	10.8	3.14	CBFA	\$6	14	255	281	D3PA	28.551	0.20546	0.016762	6.07	0.1729	0.016762
Volkswagen	Jetta [GL]	3500	10.8	3.13	CCCTA	\$6	14	255	281	D3UA	28.55	0.2055	0.0168	2.5850	0.0597	0.0169
Volkswagen	Jetta [TDI]	3500	11.0	2.76	CJAA	M6	3	222	244	DUSN	31.47	0.1338	0.0178	12.8820	-0.0209	0.0182
Volkswagen	Jetta [TDI]	3500	11.9	3.04	CJAA	\$6	8	221	243	DUSN	33.05	0.2884	0.0166	14.8370	0.1736	0.0165
Volkswagen	Jetta Hybrid	3625	10.8	3.23	CNLIA	\$6	16	146	161	DPHE	27.876	0.05426	0.016168	6.295	0.01447	0.015656
Volkswagen	Jetta SportWagen	3500	12.1	3.39	CBTA-M	M5	19	276	304	D13M	31	0.134	0.0178	10	0.365	0.0149
Volkswagen	Jetta SportWagen	3625	12.1	3.39	CBUA-M	M5	19	276	304	DM59	31.00	0.1340	0.0178	6.0000	0.0980	0.0172
Volkswagen	Jetta SportWagen	3625	12.1	3.5	CBTA-M	\$6	22	271	298	D3A	33	0.293	0.0171	-2	0.203	0.0176
Volkswagen	Jetta SportWagen	3625	12.1	3.5	CBUA-M	\$6	22	271	298	DA59	33	0.293	0.0171	-2	0.203	0.0176
Volkswagen	Jetta SportWagen [TDI]	3625	11.5	2.76	CJAA	M6	3	222	244	DUSN	30	0.2	0.0186	17	-0.03	0.0197
Volkswagen	Jetta SportWagen [TDI]	3750	12.3	3.04	CJAA	\$6	8	231	254	DUSN	35.00	0.1800	0.0193	14.0000	0.0900	0.0191
Volkswagen	Passat	3625	10.6	3.65	CBTA-M	M5	26	278	306	D13M	29.90	0.1338	0.0172	6.0700	0.1375	0.0161
Volkswagen	Passat	3625	10.6	3.64	CEUA-M	M5	25	278	306	DM59	29.90	0.1338	0.0172	17.0850	-0.1085	0.0181
Volkswagen	Passat	3750	12.4	3.44	CDVB	\$6	20	312	343	DU41	33.721	0.28837	0.017868	20.606	0.10001	0.017914
Volkswagen	Passat	3625	11.9	3.5	CBTA-M	\$6	22	280	308	D3A	30.57	0.5064	0.0133	4.2710	0.4124	0.0136
Volkswagen	Passat	3625	11.9	3.5	CBUA-M	\$6	22	280	308	DA59	30.574	0.5064	0.013328	5.845	0.43768	0.012746
Volkswagen	Passat [TDI]	3750	11.5	3.043	CKRA	M6	7	219	241	DU45	31.024	0.13384	0.01746	16.287	-0.1186	0.018583
Volkswagen	Passat [TDI]	3750	11.5	2.917	CKRA	\$6	8	228	251	DU45	31.473	0.28937	0.016005	13.779	0.11864	0.016447
Volkswagen	Tiguan	3875	14.1	3.3	CCCTA	M6	18	336	370	D3UA	37.00	0.1340	0.0247	24.0000	-0.2170	0.0251

2013 Sub-Configuration / In-Use

Volkswagen	Tiguan	3875	14.6	3.54	CCTA	S6	24	295	325	D3UJA	33.72	0.3834	0.0226	15.5120	0.2858	0.0228
Volkswagen	Tiguan [L R]	3875	14.1	3.3	CCTA	S6	24	300	330	D3UJA	40.016	0.5064	0.021825	19.558	0.35853	0.022652

Note: Engine Codes are provided above for each sub-configuration and may be verified with the application for certification for the applicable test group. The test group for each vehicle is also identified on the Vehicle Emission Control Information Label.

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Tue 3/4/2014 6:32:21 PM  
**Subject:** RE: 2015 FE Guide errors

Thanks, Dave, I have made the correction.

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Tuesday, March 04, 2014 1:01 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** 2015 FE Guide errors

Richard,

The Diesel Touareg had an error. See attached.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, February 26, 2014 1:30 PM  
**To:** Good, David  
**Subject:** RE: please call

Oh thanks Dave. It all looks good.

Richard

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Wednesday, February 26, 2014 12:44 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: please call

Richard,

Here you go,

[I had macro problems yesterday.]

Dave

**From:** Thomas, Richard (EEO) [<mailto:Richard.Thomas@vw.com>]  
**Sent:** Wednesday, February 26, 2014 10:12 AM  
**To:** Good, David  
**Subject:** please call  
**Importance:** High

Hi Dave;

I had to make changes to 2015 VGA index 007 and 006 and the annual fuel cost and 5 year savings values. If you ran that report yesterday could you see that the label audit is run again today to pick up these changes.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207

[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Peavyhouse, Robert[Peavyhouse.Robert@epa.gov]  
**Cc:** Giles, Michael (EEO)[michael.giles@vw.com]; Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Mon 3/3/2014 7:10:49 PM  
**Subject:** RE: Help requested with GHG Discrepancy

Thank you Bob.

When will the changes to your report have results displayed to four places? We wouldn't have to bother with this next year.

Best regards,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**From:** Peavyhouse, Robert [mailto:[Peavyhouse.Robert@epa.gov](mailto:Peavyhouse.Robert@epa.gov)]  
**Sent:** Monday, March 03, 2014 1:48 PM  
**To:** Giles, Michael (EEO)  
**Cc:** Thomas, Richard (EEO)  
**Subject:** RE: Help requested with GHG Discrepancy

The value comes from:

Gasoline GHG = 302.0

E85 GHG = 299.4

The model type value with AMFA equivalent credits becomes the average of the 2

$$\text{Final} = ((302.0) + (0.15 * 299.4)) / 2 = 173.455$$

This value rounds down to 173 for averaging into the fleet calculation.

This is exactly why I was telling you that I want our report changed so that it displays 4 decimal places.

Just displaying 173.5 kind of misleads mfrs to round this value up to 174.

Robert Peavyhouse  
Compliance Division  
U.S. EPA - OTAQ  
Phone: (734) 214-4814

**From:** Giles, Michael (EEO) [<mailto:michael.giles@vw.com>]  
**Sent:** Monday, March 03, 2014 1:06 PM  
**To:** Peavyhouse, Robert  
**Cc:** Thomas, Richard (EEO)  
**Subject:** RE: Help requested with GHG Discrepancy

Thanks Bob,

Could you check the LDT tab for index # ADX105. It shows GHG 1-place value of 173.5 which is somehow rounded to 173. Of course we think in any case it should be rounded to 174.

Please advise or call me if you can.

Thanks,

Mike

Michael Giles

Certification Engineer – EEO

VW Group of America

(248) 754-4229

**From:** Peavyhouse, Robert [<mailto:Peavyhouse.Robert@epa.gov>]  
**Sent:** Monday, March 03, 2014 10:59 AM  
**To:** Giles, Michael (EEO)  
**Cc:** Thomas, Richard (EEO)  
**Subject:** RE: Help requested with GHG Discrepancy

Here is my duplication of the Verify values.

The next step is to verify individual model type values for mismatch.

If you identify them, I can run the calcs for individual model types as you request them.

Robert Peavyhouse  
Compliance Division  
U.S. EPA - OTAQ  
Phone: (734) 214-4814

**From:** Giles, Michael (EEO) [<mailto:michael.giles@vw.com>]  
**Sent:** Tuesday, February 25, 2014 3:30 PM  
**To:** Peavyhouse, Robert  
**Cc:** Thomas, Richard (EEO)  
**Subject:** RE: Help requested with GHG Discrepancy

Hello Bob,

First some good news - Please ignore my request below regarding the issue with our MT index #91. We have corrected this by changing the DF rounding to whole numbers prior to adding. Once I found your email from last year that helped. NOTE – this is contrary to Dave Goods instructions to round to 1 place (!)

But, I do have another question . Our LDT “ final” calculation is off by a couple tenths, and it is not clear why. I am attaching a simple worksheet to show my calculations as well as the latest draft Verify report.

We hit the PC number right on for both baseline and final but not sure why there is a difference with this LDT fleet.

Any advice you can give here would be appreciated.

Thanks,

Mike

**From:** Giles, Michael (EEO)  
**Sent:** Monday, February 24, 2014 10:42 AM  
**To:** Peavyhouse, Robert ([Peavyhouse.Robert@epa.gov](mailto:Peavyhouse.Robert@epa.gov))  
**Cc:** Thomas, Richard (EEO) ([Richard.Thomas@vww.com](mailto:Richard.Thomas@vww.com))  
**Subject:** Help requested with GHG Discrepancy

Hello Bob,

We are working on our final CAFÉ / GHG report, and are in the process of resolving some differences.

We kindly request your help with one issue, where we find a difference between the certification CSI and the CAFÉ/GHG report values.

There is a single configuration for this model type:

MFR Code	VWX
Model Type Index:	# 91
City Test # 360	DADX10021373 CREE: 359 DF: 0.5 rounded CREE:
Highway Test # 230	DADX10021373 CREE: 230 DF: 0.5 rounded CREE:

The FTP value of  $359 + 0.5 = 360$  is found in the CSI and matches our internal data.

However, the CAFE/GHG report from VERIFY shows a value of 359 for the city test.

Per GHG rounding guidance from Dave good (last year), we do as follows:

- Round the sum of the CREE/OCREE constituents (from step 2) to nearest whole number.
- Apply city Super DF to the city CREE/OCREE test result and the hwy Super DF to the hwy CREE/OCREE test result. \*\*\* **Rounded to 1 place** \*\*\*
- After applying Super DFs, round the resultant CREE/OCREE test results to nearest whole number

We believe the 360 as calculated here and in the CSI (and consistent with the rounding rules)should be the correct value.

Please advise, or call if you would like to discuss.

Regards,

Mike

Michael Giles

Certification Engineer – EEO

VW Group of America

(248) 754-4229

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Mon 2/24/2014 4:21:06 PM  
**Subject:** 2015 Audi Labels in Verify

Hello Dave;

For Tuesday, could I ask you to please run your label audit report for the nine 2015 Audi labels that are in Verify? Label index 7, is the most important and will be release this week and it would be nice to know if all my values agree with Verify.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**Cc:** Good, David[good.david@epa.gov]  
**From:** [REDACTED] Ex. 6  
**Sent:** Thur 2/20/2014 6:50:09 PM  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

You're welcome. Thank you for the update.

[REDACTED] Ex. 6

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

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To Verify Help Desk@csc  
cc "Good.David@epamail.epa.gov"  
<Good.David@epamail.epa.gov>  
Subject RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

02/20/2014 07:55 AM

Thank you [REDACTED] Ex. 6;

We went ahead and created duplicate tests for these 2013 CAFE/GHG reports and now both PC and LDT VWGoA reports have been accepted into Verify. Now we begin to make corrects to the fleet average and standard calculations.

Best regards,  
Richard

**From:** [REDACTED] Ex. 6 [REDACTED]@csc.com] On Behalf Of Verify Help Desk  
**Sent:** Tuesday, February 18, 2014 3:56 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

The EPA has indicated that you can enter a duplicate test under the corresponding Test Vehicle and Test Vehicle configuration to satisfy the following business rule requiring a HWY test. You will just need to enter the fact that you are entering the test as a duplicate and why for the test comment.

**Transaction Message Text :** LD-FE-CA-BR167 - If a subconfiguration contains a Test Number (CA-35) and the corresponding FE Label contains a Drive Source (GL-13.5.1) equal to 'C' (Combustion Engine), then within that subconfiguration, each unique combination of Vehicle ID (TI-4), Vehicle Configuration Number (TI-5), and Averaging Group Indicator (CA-41) must contain at least one test with a 5-Cycle Test Category (TI-45) equal to 'HWY' (Test Procedure equal to 3).(Model Type Index = 106 Base Level Inertia Class = 4500 Configuration Index = 1 SubConfiguration Index = 1)

**Ex. 6**

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▼ "Thomas, Richard (EEO)" ---02/13/2014 02:25:21 PM---"Thomas, Richard (EEO)"  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)

To Verify Help Desk@csc

cc

"Thomas, Richard (EEO)"  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)

Subject RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

02/13/2014 02:25 PM

Okay, yeah I tried it...it did not help.

From: [REDACTED] **Ex. 6** [REDACTED]@csc.com] On Behalf Of Verify Help Desk

**Sent:** Thursday, February 13, 2014 1:45 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Giles, Michael (EEO)  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

We don't believe so. Two vehicles are referenced in your FE Label and because one of the vehicles does not have a HWY test this business rule is being returned.

**Ex. 6**

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▼ "Thomas, Richard (EEO)" ---02/13/2014 12:44:59 PM---"Thomas, Richard (EEO)"  
<[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

To Verify Help Desk@CSC

cc "Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>

"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>  
Subject RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

02/13/2014 12:44 PM

Is there something I might have to do with average grouping and/or percentage of average for the two city tests with different configuration numbers maybe? I'm going to try a couple scenarios.

**From:**  **Ex. 6**  @csc.com] **On Behalf Of** Verify Help Desk

**Sent:** Thursday, February 13, 2014 12:43 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Giles, Michael (EEO)  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

We looked into this issue and are consulting with the EPA. I will let you know as soon as we have an update.

**Ex. 6**

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▼ "Thomas, Richard (EEO)" ---02/12/2014 12:35:09 PM---"Thomas, Richard (EEO)"  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)

To Verify Help Desk@CSC

cc "Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>

"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

Subject RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

02/12/2014 12:35 PM

Thanks **Ex. 6**

I am down to only that one error message now; here is the Transaction Identifier: \_42272ae2-e29a-4e55-8074-ad7bcf8df706.

**From:** [redacted] **Ex. 6** @csc.com] **On Behalf Of Verify Help Desk**  
**Sent:** Wednesday, February 12, 2014 11:17 AM  
**To:** Thomas, Richard (EEO)  
**Cc:** Good, David  
**Subject:** Re: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

We are looking into this issue and will get back to you shortly.

**Ex. 6**

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▼ "Thomas, Richard (EEO)" ---02/11/2014 02:46:05 PM---"Thomas, Richard (EEO)"  
<[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

To Verify Help Desk@csc

cc "Good, David" <[good.david@epa.gov](mailto:good.david@epa.gov)>

Subject 2013 VWGoA Final LDT CAFE

"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

02/11/2014 02:45 PM

Hello [Ex. 6];

I am having trouble identifying what the problem is on the below message (BR167). The 2013 CAFE will be generated under VWX manufacturer code. This Audi model type index 106, has two city tests and one highway test numbers listed. Listed under different configuration numbers. See below:

City with S/S inactive configuration 1 test # DADX10022713

Highway with S/S inactive configuration 1 test # DADX10022714

City with S/S active configuration 0 text # DADX10022712

EPA allowed us to perform testing with the stop/start system active for only the city and US06 tests because the system does not allow the engine to stop during the other 5-cycle tests (i.e.: SC03, Cold FTP, and Highway). I think Verify is looking for a highway test in the configuration 0 (S/S active). It was successfully labeled in 2013 this way.

The transaction identifier following is for the whole LDT Volkswagen final CAFE. The other messages are related to the work I must get Porsche to work on and grant permissions to use their indexes. This years' CAFE will include Porsche but not for the GHG calculation.

Transaction Identifier: \_83c7d3bd-7d2a-4300-985c-afacb3ae5f45

**Transaction Message Text :** LD-FE-CA-BR167 - If a subconfiguration contains a Test Number (CA-35) and the corresponding FE Label contains a Drive Source (GL-13.5.1) equal to 'C' (Combustion Engine), then within that subconfiguration, each unique combination of Vehicle ID (TI-4), Vehicle Configuration Number (TI-5), and Averaging Group Indicator (CA-41) must contain at least one test with a 5-Cycle Test Category (TI-45) equal to 'HWY' (Test Procedure equal to 3).(Model Type Index = 106 Base Level Inertia Class = 4500 Configuration Index = 1 SubConfiguration Index = 1)

If you have any questions today, I am here until 3 pm.

Thanks,  
Richard

*Richard E. Thomas*

VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Verify Help Desk[verifyhelp@csc.com]  
**Cc:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Thur 2/20/2014 12:55:11 PM  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Thank you [Ex. 4 - CBI];

We went ahead and created duplicate tests for these 2013 CAFE/GHG reports and now both PC and LDT VWGoA reports have been accepted into Verify. Now we begin to make corrects to the fleet average and standard calculations.

Best regards,

Richard

**From:** [Ex. 4 - CBI]@csc.com] **On Behalf Of** Verify Help Desk  
**Sent:** Tuesday, February 18, 2014 3:56 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

The EPA has indicated that you can enter a duplicate test under the corresponding Test Vehicle and Test Vehicle configuration to satisfy the following business rule requiring a HWY test. You will just need to enter the fact that you are entering the test as a duplicate and why for the test comment.

**Transaction Message Text :** LD-FE-CA-BR167 - If a subconfiguration contains a Test Number (CA-35) and the corresponding FE Label contains a Drive Source (GL-13.5.1) equal to 'C' (Combustion Engine), then within that subconfiguration, each unique combination of Vehicle ID (TI-4), Vehicle Configuration Number (TI-5), and Averaging Group Indicator (CA-41) must contain at least one test with a 5-Cycle Test Category (TI-45) equal to 'HWY' (Test Procedure equal to 3). (Model Type Index = 106 Base Level Inertia Class = 4500 Configuration Index = 1 SubConfiguration Index = 1)

[Ex. 4 - CBI]

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"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

02/13/2014 02:25 PM

Verify Help Desk@csc

cc

SUBj:2013 VWGoA Final LDT CAFE (HLP-4928)

Okay, yeah I tried it...it did not help.

**From:** [Ex. 4 - CBI](#) @csc.com] **On Behalf Of Verify Help Desk**  
**Sent:** Thursday, February 13, 2014 1:45 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Giles, Michael (EEO)  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

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[Ex. 4 - CBI](#)

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<Richard.Thomas@vw.com>

"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

02/13/2014 12:44 PM

ToVerify Help Desk@csc

cc"Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>

SubjectRE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Is there something I might have to do with average grouping and/or percentage of average for the two city tests with different configuration numbers maybe? I'm going to try a couple scenarios.

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**Sent:** Thursday, February 13, 2014 12:43 PM  
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**Cc:** Giles, Michael (EEO)  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

We looked into this issue and are consulting with the EPA. I will let you know as soon as we have an update.

Ex. 4 - CBI

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<[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

02/12/2014 12:35 PM

ToVerify Help Desk@csc

cc"Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>

SubjectRE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Thanks [Ex. 4 - CBI]

I am down to only that one error message now; here is the Transaction Identifier: \_42272ae2-e29a-4e55-8074-ad7bcf8df706.

**From:** [Ex. 4 - CBI] [@csc.com](#)] **On Behalf Of Verify Help Desk**  
**Sent:** Wednesday, February 12, 2014 11:17 AM  
**To:** Thomas, Richard (EEO)  
**Cc:** Good, David  
**Subject:** Re: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

We are looking into this issue and will get back to you shortly.

[Ex. 4 - CBI]

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"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

02/11/2014 02:45 PM

ToVerify Help Desk@CSC

cc"Good, David" <[good.david@epa.gov](mailto:good.david@epa.gov)>

Subject2013 VWGoA Final LDT CAFE

Hello [Ex. 4 - CBI]

I am having trouble identifying what the problem is on the below message (BR167). The 2013 CAFE will be generated under VWX manufacturer code. This Audi model type index 106, has two city tests and one highway test numbers listed. Listed under different configuration numbers. See below:

City with S/S inactive configuration 1 test # DADX10022713

Highway with S/S inactive configuration 1 test # DADX10022714

City with S/S active configuration 0 text # DADX10022712

EPA allowed us to perform testing with the stop/start system active for only the city and US06 tests because the system does not allow the engine to stop during the other 5-cycle tests (i.e.: SC03, Cold FTP, and Highway). I think Verify is looking for a highway test in the configuration 0 (S/S active). It was successfully labeled in 2013 this way.

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If you have any questions today, I am here until 3 pm.

Thanks,  
Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 2/19/2014 1:18:22 PM  
**Subject:** FW: 2013 VWGoA Final LDT CAFE (HLP-4928)

Can we discuss?

**From:** [Ex. 4 - CBI]@csc.com] **On Behalf Of** Verify Help Desk  
**Sent:** Tuesday, February 18, 2014 3:56 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

The EPA has indicated that you can enter a duplicate test under the corresponding Test Vehicle and Test Vehicle configuration to satisfy the following business rule requiring a HWY test. You will just need to enter the fact that you are entering the test as a duplicate and why for the test comment.

**Transaction Message Text :** LD-FE-CA-BR167 - If a subconfiguration contains a Test Number (CA-35) and the corresponding FE Label contains a Drive Source (GL-13.5.1) equal to 'C' (Combustion Engine), then within that subconfiguration, each unique combination of Vehicle ID (TI-4), Vehicle Configuration Number (TI-5), and Averaging Group Indicator (CA-41) must contain at least one test with a 5-Cycle Test Category (TI-45) equal to 'HWY' (Test Procedure equal to 3).(Model Type Index = 106 Base Level Inertia Class = 4500 Configuration Index = 1 SubConfiguration Index = 1)

[Ex. 4 - CBI]

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

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▼ "Thomas, Richard (EEO)" ---02/13/2014 02:25:21 PM---"Thomas, Richard (EEO)"  
<[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

02/13/2014 02:25 PM

Verify Help Desk@csc

cc

RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Okay, yeah I tried it...it did not help.

**From:** Ex. 4 - CBI @csc.com] On Behalf Of Verify Help Desk  
**Sent:** Thursday, February 13, 2014 1:45 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Giles, Michael (EEO)  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

We don't believe so. Two vehicles are referenced in your FE Label and because one of the vehicles does not have a HWY test this business rule is being returned.

Ex. 4 - CBI

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Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

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"Thomas, Richard (EEO)" ---02/13/2014 12:44:59 PM---"Thomas, Richard (EEO)"  
<[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

02/13/2014 12:44 PM

ToVerify Help Desk@csc

cc"Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>

SubjectRE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Is there something I might have to do with average grouping and/or percentage of average for the two city tests with different configuration numbers maybe? I'm going to try a couple scenarios.

**From:** [REDACTED] **Ex. 4 - CBI** @csc.com **On Behalf Of Verify Help Desk**  
**Sent:** Thursday, February 13, 2014 12:43 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Giles, Michael (EEO)  
**Subject:** RE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

We looked into this issue and are consulting with the EPA. I will let you know as soon as we have an update.

[Ex. 4 - CBI]

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Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

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▼ "Thomas, Richard (EEO)" ---02/12/2014 12:35:09 PM---"Thomas, Richard (EEO)"  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)

"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

02/12/2014 12:35 PM

ToVerify Help Desk@csc

cc"Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>

SubjectRE: 2013 VWGoA Final LDT CAFE (HLP-4928)

Thanks Vince,

I am down to only that one error message now; here is the Transaction Identifier: \_42272ae2-e29a-4e55-8074-ad7bcf8df706.

**From:** [REDACTED] **Ex. 4 - CBI** [\[@csc.com\]](#) **On Behalf Of Verify Help Desk**  
**Sent:** Wednesday, February 12, 2014 11:17 AM  
**To:** Thomas, Richard (EEO)  
**Cc:** Good, David  
**Subject:** Re: 2013 VWGoA Final LDT CAFE (HLP-4928)

Hello Mr. Thomas,

We are looking into this issue and will get back to you shortly.

[Ex. 4 - CBI]

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

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▼ "Thomas, Richard (EEO)" ---02/11/2014 02:46:05 PM---"Thomas, Richard (EEO)"  
[<Richard.Thomas@vw.com>](mailto:Richard.Thomas@vw.com)

"Thomas, Richard (EEO)" <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>

02/11/2014 02:45 PM

ToVerify Help Desk@CSC

cc"Good, David" <[good.david@epa.gov](mailto:good.david@epa.gov)>

Subject2013 VWGoA Final LDT CAFE

Hello

[REDACTED]

I am having trouble identifying what the problem is on the below message (BR167). The 2013 CAFE will be generated under VWX manufacturer code. This Audi model type index 106, has two city tests and one highway test numbers listed. Listed under different configuration numbers. See below:

City with S/S inactive configuration 1 test # DADX10022713

Highway with S/S inactive configuration 1 test # DADX10022714

City with S/S active configuration 0 text # DADX10022712

EPA allowed us to perform testing with the stop/start system active for only the city and US06 tests because the system does not allow the engine to stop during the other 5-cycle tests (i.e.: SC03, Cold FTP, and Highway). I think Verify is looking for a highway test in the configuration 0 (S/S active). It was successfully labeled in 2013 this way.

The transaction identifier following is for the whole LDT Volkswagen final CAFE. The other messages are related to the work I must get Porsche to work on and grant permissions to use their indexes. This years' CAFE will include Porsche but not for the GHG calculation.

Transaction Identifier: \_83c7d3bd-7d2a-4300-985c-afacb3ae5f45

**Transaction Message Text :** LD-FE-CA-BR167 - If a subconfiguration contains a Test Number (CA-35) and the corresponding FE Label contains a Drive Source (GL-13.5.1) equal to 'C' (Combustion Engine), then within that subconfiguration, each unique combination of Vehicle ID (TI-4), Vehicle Configuration Number (TI-5), and Averaging Group Indicator (CA-41) must contain at least one test with a 5-Cycle Test Category (TI-45) equal to 'HWY' (Test Procedure equal to 3).(Model Type Index = 106 Base Level Inertia Class = 4500 Configuration Index = 1 SubConfiguration Index = 1)

If you have any questions today, I am here until 3 pm.

Thanks,  
Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Ball, Joel[ball.joel@epa.gov]; Good, David[good.david@epa.gov]; Pidgeon, Bill[pidgeon.bill@epa.gov]; Ex. 7

**Cc:** Schmidt, Oliver (EEO)[Oliver.Schmidt@vw.com]; Ex. 7

**From:** Glas, Tobias  
**Sent:** Fri 2/14/2014 9:08:23 PM  
**Subject:** FW: IUPV

Hello gentleman !

Here is a quick overview about the IUPV program for AUDI and VW:

**MY 2012 Low Mileage ✓**

-  
-17 test groups

-39 vehicles

-11 ORVR + SHED tests

All vehicles tested and submitted through Verify ✓

-  
**My 2008 High Altitude: ✓**

-  
-14 test groups

-11 vehicles

-vehicles for 3 test groups couldn't be found

-  
All vehicles tested and submitted through Verify ✓

-

**My 2008 High Mileage:**

-  
-14 Testgroups

-50 vehicles

-11 ORVR + SHED tests

-vehicles for one test group couldn't be found

All but one vehicle are tested and submitted. Vehicle pick-up for the missing car was scheduled for January but was rescheduled by customer to March.

As soon as the car is tested I will let you know.

If you have any questions don't hesitate to contact me.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Tue 2/11/2014 5:44:24 PM  
**Subject:** FW: EOS duplicates?  
2011 FEGuide1-for DOE-OK to release-no sales-1-28-2014-Re19 macro\_EOS.xlsx

Richard,

Please take a look at the spreadsheet. I think the data in the 2<sup>nd</sup> line (the ADD data) is correct and that it replaces the data in the first line.

Let me know.

Thanks

**From:** Hopson, Janet L. [mailto:[hopsonjl@ornl.gov](mailto:hopsonjl@ornl.gov)]  
**Sent:** Monday, February 10, 2014 2:22 PM  
**To:** Good, David  
**Subject:** FW: EOS duplicates?

Dave:

Could you let us know what to do with these two?

Thanks,

Janet

**From:** Li, Jia

**Sent:** Monday, February 10, 2014 2:20 PM  
**To:** Hopson, Janet L.  
**Subject:** EOS duplicates?

Janet,

These two looks like duplicates, but they have different ID.. not sure what to do.

Lisa

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Tue 1/14/2014 8:53:15 PM  
**Subject:** 2015 FE Guide - Errors in Verify as of 1/14/2014  
VGA2015 FEGuide-all rel dates-no-sales-1-14-2014.xlsx

Richard,

Re: 2015 FE Guide - Errors in Verify as of 1/14/2014

Here you go.

Dave

**To:** Good, David[good.david@epa.gov]  
**From:** Giles, Michael (EEO)  
**Sent:** Wed 2/5/2014 2:04:51 PM  
**Subject:** RE: CREE Rounding  
CREE Calcs & Rounding-w-superDFs - copy.810-rev1-9-13.doc

Hello Dave,

Here it is.

Thanks

Mike

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Tuesday, February 04, 2014 5:09 PM  
**To:** Giles, Michael (EEO)  
**Subject:** RE: CREE Rounding

Mike,

Please send me a copy of the 1/9/2013 rounding guidance which I sent you.

Thanks

**From:** Giles, Michael (EEO) [<mailto:michael.giles@vw.com>]  
**Sent:** Tuesday, February 04, 2014 3:15 PM  
**To:** Good, David  
**Subject:** CREE Rounding

Hello Dave,

I am working on our data set for GHG reporting for MY 2013. Last year, we had some last minute adjustments to make with the CREE rounding, which I am hoping to correct for this year.

I have a rounding guidance document from you, with revision date 1/9/2013. If you have made any further changes, could you please send me a copy for reference?

Many thanks,

Mike

Michael Giles

Certification Engineer – EEO

VW Group of America

(248) 754-4229

# Final Greenhouse Gas Rule 75 FR 25324 (May 7, 2010)

## DRAFT Summary of CREE Rounding - (ASTM Rounding)

- Regulations Take Precedence

D. Good 7/21/2010, rev 1/13/2011, 1/9/2013

## DRAFT - CREE/OCREE Calculations using city & hwy “Super DFs”

### **Test Data – round city/hwy to nearest whole gpm:**

600.113(g) & 600.206(a)(1) Round City & Hwy CREE/OCREE to nearest whole gpm value

1. Although CREE/OCREE includes deterioration factors (DFs) (or aged components) per 600.113(g)(2)(ii) & (g)(2)(iv)(3), do not apply DFs to each constituent

- Round HC to nearest 0.001
  - Round CO to nearest 0.01 gpm
  - Round CO<sub>2</sub> to nearest whole number
  - Round NMHC to nearest 0.0001 gpm
  - Round N<sub>2</sub>O to nearest 0.0001 gpm
  - Round CH<sub>4</sub> to nearest 0.0001 gpm
  - Round CH<sub>3</sub>OH, C<sub>2</sub>H<sub>5</sub>OH, C<sub>2</sub>H<sub>4</sub>O, HCHO to nearest 0.0001 gpm
2. Store the sum of the CREE/OCREE constituent values (rounded as above) at the test level
    - For OCREE, include the 298 N<sub>2</sub>O factor and the 25 CH<sub>4</sub> factor
  3. Using the Super DFs, calculate the 120K CREE/OCREE levels (used for the certification level of a test group and the final model year report) as follows:
    - Round the sum of the CREE/OCREE constituents (from step 2) to nearest whole number.
    - Apply city Super DF to the city CREE/OCREE test result and the hwy Super DF to the hwy CREE/OCREE test result.
      - Note: Normally, one “Super DF” would be used for both city and hwy tests, however in some cases, manufacturers may want to use separate city & hwy DFs
    - After applying Super DFs, round the resultant CREE/OCREE test results to nearest whole number

### How to Determine Super DFs:

- Additive City Super DFs - Manufacturers would determine DFs normally for each durability group (per 86.1823-08(a) thru (l)) for all CREE/OCREE constituents except CO<sub>2</sub>. For CO<sub>2</sub>, manufacturers could use a zero DF per 86.1823-08(m)(1) or an alternative DF per 86.1823-08(m)(1)(iii) or (iv). Additive CREE/OCREE Super DFs would be the sum of the individual constituent DFs using the following equation for gasoline vehicles:

$$\text{CREE}_{\text{DF}} = [(CWF/0.273) \times \text{NMHC}_{\text{DF}} + 1.571 \times \text{CO}_{\text{DF}} + \text{CO2}_{\text{DF}}]$$

Round the final CREE/OCREE Super DF to the nearest 0.1 grams/mile similar to 86.1823-08(f)(1)(ii)(B). Additive CREE/OCREE Super DFs less than zero would be changed to zero, similar to 86.1823-08(f)(1)(ii)(B).

- Additive Highway Super DFs - Manufacturers would determine hwy Super DFs for each durability group similar to additive City Super DFs, as outlined above. The provisions of 86.1823-08(m)(3) allow manufacturers the option of using the applicable city Super DF for highway tests (in lieu of determining separate highway Super DF for CREE/OCREE).
- Multiplicative City Super DFs - Same as above for Additive City Super DFs, except that the following equation should be used:

$$\text{CREE}_{\text{DF}} = \text{CREE}_{120\text{K emissions}} / \text{CREE}_{4\text{K emissions}}$$

Again, for CO<sub>2</sub>, manufacturers should mathematically adjust the durability data so that CO<sub>2</sub> uses a 1.0 DF per 86.1823-08(m)(1) or an alternative DF per 86.1823-08(m)(1)(iii) or (iv). For example, manufacturers should calculate the CREE/OCREE DFs using the 4,000 mile CO<sub>2</sub> emission value for both the 4,000 and 120,000 mile data points (mathematically assigning no deterioration to CO<sub>2</sub> emissions). Multiplicative CREE/OCREE Super DFs should be rounded to three decimal places similar to 86.1823-08(f)(1)(ii)(A). Multiplicative CREE/OCREE Super DFs less than one would be changed to one, similar to 86.1823-08(f)(1)(ii)(B).

- Multiplicative Highway Super DFs – Manufacturers would determine hwy Super DFs for each durability group as outlined above for multiplicative City Super DFs. The provisions of 86.1823-08(m)(3) allow manufacturers the option of using the applicable city Super DF for highway tests (in lieu of determining separate highway Super DF for CREE/OCREE).
- Assigned DFs for Small Volume Manufacturers and Small Volume Test Groups – Similar to the requirements outlined in 40 CFR 86.1826-01 and 86.1838-01 small volume manufacturers can use assigned Super DFs for CREE/OCREE city and highway tests. EPA will determine the appropriate city and highway Super DFs by guidance letter. Super DFs could be mathematically determined from the DFs provided in CCD-05-10 for NMHC/NMOG, CO and HCHO (and assuming emission levels in compliance with the 2012 emission standards). Note that CCD-05-10 provides only multiplicative assigned DFs.

#### **Subconfiguration - round city/hwy to nearest 0.1 gpm:**

600.206(a)(2)(ii) Arithmetically average multiple tests and round City & Hwy CREE to nearest 0.1 gpm

- If only one city or one hwy test, CREE is rounded to nearest whole gpm value

#### **Configuration - round city/hwy to nearest 0.1 gpm:**

600.206(a)(2)(iii) Sales weight subconfiguration City & Hwy CREE values determined above & round product to nearest 0.1 gpm.

- Determine subconfiguration sales fraction to nearest 0.0001

#### **Configurations for Fleet Ave CREE calcs - round combined CREE to nearest 0.1 gpm:**

600.206(a)(3)(ii) Arithmetically average (55/45) City & Hwy CREE values determined above & round combined CREE product to nearest 0.1 gpm

#### **Base Level - round combined CREE to nearest 0.1 gpm:**

600.208(a)(4)(ii) Sales weight configuration city/hwy/combined CREE values determined above & round city/hwy/combined product to nearest whole gpm value [EPA proposed in the FE Label rule to revise 600.208(a)(4)(ii) to require rounding to the nearest 0.1 gpm]

- Determine configuration sales fraction to nearest 0.0001

#### **Model Type - round combined CREE to nearest whole gpm:**

600.208(b)(3)(ii), (b)(4) and 600.510(b)(2)(v) Sales weight base level city/hwy/combined CREE values determined above & round city/hwy/combined CREE product to nearest gpm value

- Determine base level sales fraction to nearest 0.0001

#### **Corporate Average CREE - round combined CREE to nearest whole gpm:**

600.510 (a)(2), (b)(2), (j) Sales weight model type combined CREE values determined above & round combined CREE product to the nearest whole gpm value.

- Actual production data are used for each model type instead of sales fraction

- Notes:**
- (1) Sales means “produced and delivered for sale;” ref. 86.1865-12(i)(1)
  - (2) To prevent rounding errors, if only one city or highway test is used for several subconfigurations, the combined results of the sales-weighted configuration, base level and model type calculations must equal the tested city and highway CREE values.

**To:** mb-nathan-hinderer [nathan.hinderer@daimler.com]; william.meschievitz@tema.toyota.com[william.meschievitz@tema.toyota.com]; tommy\_chang@ahm.honda.com[tommy\_chang@ahm.honda.com]; JRugge@subaru.com[JRugge@subaru.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; KhanF@NRD.NISSAN-USA.COM[KhanF@NRD.NISSAN-USA.COM]; Tobias Glas[tobias.glas@vw.com]; Peace O Uwague[peace.ouwague@bmwnaext.com]; rds116@chrysler.com[rds116@chrysler.com]; ghall12@jaguarlandrover.com[ghall12@jaguarlandrover.com]; rbarre20@volvocars.com[rbarre20@volvocars.com]; Beth Borland [bab11@chrysler.com]; Mark M Poll[mpoll1@ford.com]; christopher.cislo@gm.com[christopher.cislo@gm.com]; ross.gatzke@porsche.us[ross.gatzke@porsche.us]; balsip@suz.com[balsip@suz.com]; Lindsey Jeng[ljeng@hatci.com]  
**Cc:** Dave Barker[dba1@subaru.com]; peter\_meier@ahm.honda.com[peter\_meier@ahm.honda.com]; tom.beierschmitt@tema.toyota.com[tom.beierschmitt@tema.toyota.com]; drobertson@mazdausa.com[drobertson@mazdausa.com]; david.patterson@na.mitsubishi-motors.com[david.patterson@na.mitsubishi-motors.com]; yamaday@ntcna.nissan-usa.com[yamaday@ntcna.nissan-usa.com]; oliver.schmidt@vw.com[oliver.schmidt@vw.com]; Andrea.Antholzner@bmwna.com[Andrea.Antholzner@bmwna.com]; vvarjabe@jaguar.com[vvarjabe@jaguar.com]; vvarjabe@jaguarlandrover.com[vvarjabe@jaguarlandrover.com]; brian.fitzgerald@daimler.com[brian.fitzgerald@daimler.com]; gbuffali@volvocars.com[gbuffali@volvocars.com]; ml90@chrysler.com[ml90@chrysler.com]; tfagerma@ford.com[tfagerma@ford.com]; randall.c.harvey@gm.com[randall.c.harvey@gm.com]; David Geiger[david.geiger@porsche.us]; walter.lewis@porsche.us[walter.lewis@porsche.us]; luis.hernandez@suz.com[luis.hernandez@suz.com]; Tony D'Ambrosi[adambrosi@hatci.com]; Peavyhouse, Robert[Peavyhouse.Robert@epa.gov]; French, Roberts[french.roberts@epa.gov]; Wehrly, Linc[wehrly.linc@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Ball, Joel[ball.joel@epa.gov]; Anderson, Tom[Anderson.Tom@epa.gov]; Dalton, Joel[[Dalton.Joel@epa.gov]; Ott, William[ott.william@epa.gov]  
**From:** Good, David  
**Sent:** Fri 1/31/2014 6:37:05 PM  
**Subject:** RE: IUPV - Entering Greenhouse Gas data (CREE or OCREE, CH4) into the EPA Verify database; Verify changes, etc.

To all manufacturers IUPV contacts,

Please note that in Verify Release 13.1 (deployed Jan 24, 2014) that EPA has added two new Test Result/Emission Names which can be used in Verify's IUPV Module only. The new test result/emission names are "Combined CREE" and "Combined OPT-CREE."

Please begin using these IUPV emission names as soon as possible (and don't use the work-around method of entering IUPV combined CREE/OCREE data). [Thanks much for using the "work-around" method of entering combined CREE IUPV data over the past few months.] If you used the "work-around method" of entering CREE/OCREE data, it is not necessary to correct previously entered IUPV data using the new test result/emission names.

Please enter the appropriate Combined CREE or Combined OPT-CREE test results along with the appropriate Combined CREE or Combined OPT-CREE in-use standard, pass/fail results, etc. for the highway test only. As a reminder, individual in-use GHG standards for specific in-use vehicles are required to be included in the manufacturer's final CAFE/GHG model year report, ref. 40 CFR 86.1818-12(d); and 40 CFR 600.512-12(c)(11).

As of the first week in January, 2014, some manufacturers have not been entering CREE/OCREE data and/or CH4 data into Verify for 2012 IUPV tests. In addition, some manufacturers seem to be missing 2012 low mileage IUPV data for some of their 2012 test groups. Please double check on the status of your 2012 IUPV program and let Bill Pidgeon ([pidgeon.bill@epa.gov](mailto:pidgeon.bill@epa.gov)) and I know if your program is running late. I will try to send manufacturers with missing data a follow-up email message in the next few days.

#### Tips for entering IUPV data:

1. Please enter Combined CREE or Combined OPT-CREE test results (weighted 55% city and 45% highway) for the highway test procedure only.
2. Please do not enter both Combined CREE and Combined OPT-CREE values. Enter either CREE or OPT-CREE values which are consistent with the way you submitted data in your CAFE/GHG model year report for the applicable model year.
3. Please enter CH4 test results, standards, pass/fail results on the FTP test only.
4. Please enter N2O test results, standards, pass/fail results on the FTP test only if you actually measured N2O----e.g. don't enter the default 0.010 N2O values.

#### Reminders:

1. 2012 IUPV low mileage testing was required to be completed by Dec 31, 2013 and data submitted to EPA's Verify database prior to Jan 31, 2014, ref. 40 CFR 86.1845-04(b)(4) and 86.1847(b). EPA has extended the window in Verify to Feb 28, 2014 for reporting and correcting 2012 model year low mileage IUPV test data. Please contact Bill Pidgeon by email or at 734-214-4416 if you need to submit data to Verify after that date.
2. When entering IUPV data in Verify, please check your Verify mailbox to make sure that

the data was accepted by Verify.

Thanks much.

Please call contact me at 734-214-4450 or by email if you have any questions.

Dave

**To:** Good, David[good.david@epa.gov]  
**From:** Schmidt, Oliver (EEO)  
**Sent:** Fri 1/31/2014 6:37:10 PM  
**Subject:** Automatic reply: IUVP - Entering Greenhouse Gas data (CREE or OCREE, CH4) into the EPA Verify database; Verify changes, etc.

Hello,

thank you for your mail.  
I am on a business trip with limited access to email.

Oliver Schmidt

**To:** Good, David[good.david@epa.gov]  
**Cc:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Thomas, Richard (EEO)  
**Sent:** Thur 1/30/2014 2:53:58 PM  
**Subject:** IUVP Contact

Hi Dave;

Our IUVP contact is Mr. Tobias Glas, office phone number 248 754 4211, cell [REDACTED] .  
email address is Tobias.Glas@VW.com .

[REDACTED] **Ex. 6** [REDACTED]

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

**To:** Good, David[good.david@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]  
**From:** Thomas, Richard (EEO)  
**Sent:** Fri 1/24/2014 4:41:21 PM  
**Subject:** 2015 Audi Fuel Economy Labels

Hi Dave;

To summarize our phone discussion I have the following. The release dates for index #005 (A3 Cabriolet quattro) and #006 (A3 Cabriolet) have been changed to May 12, 2014 and therefore please see that they are removed from the on-line guide.

The interior volume for the A3 quattro index #004 was listed as two door and should be four door. We will make the changes to Verify and reprocess the label index. You agreed to change it before you send 2015 labels to Washington today.

We are working with the help desk to change the full name for the division Audi, from Audi AG to just Audi.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Fri 1/17/2014 12:31:24 PM  
**Subject:** 2015 Model Added

Hi Dave;

For your information I have now labeled the 2015 Volkswagen GTI with manual six speed transmission. It resides in Verify.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Good, David[good.david@epa.gov]  
**Cc:** [REDACTED]  
**From:** [REDACTED] **Ex. 7**  
**Sent:** Thur 1/16/2014 12:41:57 PM  
**Subject:** RE: 2015 FE Guide as of 1/15/2014 attached

Morning Dave;

Thanks, it looks good with one exception. Column 4 and 5 lists the Mfr Name and Division respectively. We are now using the VGA for the Volkswagen Group of America manufacturer, but which division name will appear on the web site the short division name or the full division name? Our full name, for example Volkswagen AG, appears on the certificate. We of course would rather see the short name or just Volkswagen or Audi appear in the guide. Please call me so we can discuss.

Thanks,

**Ex. 7**

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Wednesday, January 15, 2014 3:32 PM  
**To:** [REDACTED] **Ex. 7**  
**Subject:** 2015 FE Guide as of 1/15/2014 attached

**Ex. 7**

Our macro didn't pick up any errors.

Dave

**To:** French\_Roberts[french.roberts@epa.gov]  
**Cc:** [REDACTED]  
**From:** [REDACTED] **Ex. 7** [REDACTED]  
**Sent:** Good, David[good.david@epa.gov]  
**Subject:** Wed 1/15/2014 1:56:00 PM  
FW: CO2 label values for some models

Hi Rob,

I received the data from Wolfsburg for the Volkswagen Eos index 078 and now see that the US06 value I entered had a typed in error where the second bag should have been 266 and not the 226 I used in the calculator. I have corrected this index in Verify for 2014. If you notice any other discrepancies please let me know.

Best regards,

**Ex. 7**

**From:** [REDACTED] **Ex. 7** [REDACTED]  
**Sent:** Friday, January 10, 2014 9:22 AM  
**To:** 'French, Roberts'  
**Cc:** 'Good, David'; [REDACTED] **Ex. 7** [REDACTED]  
**Subject:** RE: CO2 label values for some models

Hello Rob;

I looked into our labels indexes 58 and 59 and found that the calculated 5-cycle CO2 values transposed from my 5-cycle calculator to my Excel worksheet for the base level and model type calculation was not correct. All CO2 values were incorrect. The correct 5-cycle rounded CO2 values for both the Audi S4 and Audi S5 are: city 519, highway 341 and 439 for the combined. I have made this correction to those two indexes in Verify.

Since the values for the fuel economy are entered into a calculator separately from the CO2 and there is obviously no checks by the EPA audit system the values were not flagged by the EPA system and we had no internal system to make that comparison either. I will now add a quick check to make this rough comparison between fuel economy and CO2 on my worksheet for

model type calculations, hopefully to prevent this error from occurring again.

The second case involves the Volkswagen Eos model (index 78) that was carried over from 2010 model year whereby we had to ask the factory to provide the bag CO2 data for the old original tests that were originally sent to us without bag CO2 data when we started labeling these models for 2013 and the new fuel economy label. I am trying to track down the bag information for that configuration because from the values I had at that time, it resulted in the values I submitted into Verify. I suspect the bag CO2 values were not right from Germany. This may take some time and I will be out of the office next week.

If you have any comments or suggestions please contact me today.

Thanks,

**Ex. 7**

VOLKSWAGEN Group of America, Inc.

**Ex. 7**

**From:** French, Roberts [mailto:[french.roberts@epa.gov](mailto:french.roberts@epa.gov)]  
**Sent:** Thursday, January 09, 2014 1:27 PM  
**To:**  Ex. 7  
**Subject:** CO2 label values for some models

**Ex. 7**

A staffer here at EPA is working on listing qualifying vehicles for low-GHG federal fleet purchases, where the qualifying is based on the label CO2 value. She ran a quick check for consistency between CO2 and MPG values, using the simple 8887 grams/gallon figure that we use for such conversions. This process identified a few outliers among a number of companies, and we'd like to try to track down errors (if any) and repair them.

The first case for VW is the Audi S4 and S5 (Model Type Indices 58 and 59). On the second page of the attached document you will see the issues outlined in my comments. We first identified that the Combined value of 403 g/mi seemed inconsistent with the unrounded MPG value of 20.1767 (we would expect something more along the lines of 440 g/mi). Then we noticed that the 5-cycle adjusted City value is actually lower than the unadjusted value (443>441.7). Based on the test data I have access to in Verify, which does not include the bag-by-bag CO2 values, I calculated that the adjusted City value should be more like 521 g/mi. This doesn't jibe with the MPG values at the top of page 3, which show decreasing MPG (as expected). So something is going on there.

The second case is the VW Eos (Model Type Index 78). We think there may be something going on with the 5-cycle Highway calculation, where our transformation using 8887 is about 13% off from the highway value of 257 g/mi in Verify. Using the data available to me I get a Highway adjusted value of about 295 g/mi, whereas you reported in Verify a value of 256.6 g/mi. I couldn't pinpoint anything specific that might have led to this difference, but maybe you can find out.

If you could dig into these a little and let me know what you find it would be very helpful. I know that measurement error, rounding, and fuel qualities can all make CO2 bounce around for a given MPG value (i.e., 25 MPG is rarely exactly 355 g/mi), but we'd like to try to find out how we can have some business rules or thresholds in Verify that snag actual errors if we can.

Best Wishes for a Happy New Year,

Rob

**Roberts W. French, Jr.**

**Environmental Protection Specialist**

**Compliance Division**

National Vehicle and Fuel Emissions Laboratory

2000 Traverwood Drive

Ann Arbor, Michigan 48105

Phone: (734) 214-4380

Fax: (734) 214-4053

**To:** Good, David[good.david@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 1/15/2014 11:14:50 AM  
**Subject:** FW: 2015 Audi labels

Hi Dave,

I corrected index 006 now.

Thanks,

Richard

**From:** Thomas, Richard (EEO)  
**Sent:** Tuesday, January 14, 2014 4:17 PM  
**To:** 'Good, David'  
**Subject:** RE: 2015 Audi labels

Okay Dave thanks. I know what is wrong with the 1.8L label you checked earlier and will make the correction tomorrow. I selected the wrong fuel.

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Tuesday, January 14, 2014 4:08 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: 2015 Audi labels

Richard,

I'll run another query tomorrow (to send to DOE for posting on the web). I'll send you any errors at that time.

Dave

**From:** Thomas, Richard (EEO) [<mailto:Richard.Thomas@vw.com>]  
**Sent:** Tuesday, January 14, 2014 12:15 PM  
**To:** Good, David  
**Subject:** 2015 Audi labels

Hi Dave;

Those two 2015 Audi indexes (002 and 003), I spoke about have now been successfully entered into Verify. If you could take a look at indexes 002 through 006 that would be great.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** French, Roberts[french.roberts@epa.gov]  
**Cc:** Good, David[good.david@epa.gov];  
**From:** [REDACTED] **Ex. 7**  
**Sent:** Fri 1/10/2014 2:21:44 PM  
**Subject:** RE: CO2 label values for some models

Hello Rob;

I looked into our labels indexes 58 and 59 and found that the calculated 5-cycle CO2 values transposed from my 5-cycle calculator to my Excel worksheet for the base level and model type calculation was not correct. All CO2 values were incorrect. The correct 5-cycle rounded CO2 values for both the Audi S4 and Audi S5 are: city 519, highway 341 and 439 for the combined. I have made this correction to those two indexes in Verify.

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If you have any comments or suggestions please contact me today.

Thanks,

[REDACTED] **Ex. 7**

**Ex. 7**

VOLKSWAGEN Group of America, Inc.

# Ex. 7

**From:** French, Roberts [mailto:[french.roberts@epa.gov](mailto:french.roberts@epa.gov)]  
**Sent:** Thursday, January 09, 2014 1:27 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** CO2 label values for some models

Richard,

A staffer here at EPA is working on listing qualifying vehicles for low-GHG federal fleet purchases, where the qualifying is based on the label CO2 value. She ran a quick check for consistency between CO2 and MPG values, using the simple 8887 grams/gallon figure that we use for such conversions. This process identified a few outliers among a number of companies, and we'd like to try to track down errors (if any) and repair them.

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(443>441.7). Based on the test data I have access to in Verify, which does not include the bag-by-bag CO2 values, I calculated that the adjusted City value should be more like 521 g/mi. This doesn't jibe with the MPG values at the top of page 3, which show decreasing MPG (as expected). So something is going on there.

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If you could dig into these a little and let me know what you find it would be very helpful. I know that measurement error, rounding, and fuel qualities can all make CO2 bounce around for a given MPG value (i.e., 25 MPG is rarely exactly 355 g/mi), but we'd like to try to find out how we can have some business rules or thresholds in Verify that snag actual errors if we can.

Best Wishes for a Happy New Year,

Rob

**Roberts W. French, Jr.**

**Environmental Protection Specialist**

**Compliance Division**

National Vehicle and Fuel Emissions Laboratory

2000 Traverwood Drive

Ann Arbor, Michigan 48105

Phone: (734) 214-4380

Fax: (734) 214-4053

**To:** Good, David [good.david@epa.gov]  
**From:** [redacted] **Ex. 7**  
**Sent:** Wed 1/8/2014 11:12:19 AM  
**Subject:** RE: 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter (30.7mpg) disagrees with Verify (33.674)  
[Final CAFE 2012 PC to EPA corrected Jan 2014.pdf](#)

Hi Dave;

Please find attached the corrected 2012 VWGoA Final Passenger Car CAFE cover letter. If you have any questions please contact me. I will enter this same file into Verify today.

**Ex. 7**

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Thursday, January 02, 2014 3:38 PM  
**To:** [redacted] **Ex. 7**  
**Cc:** French, Roberts; [redacted] **Ex. 7**  
**Subject:** RE: 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter (30.7mpg) disagrees with Verify (33.674)

**Ex. 7**

Happy New Year, etc.

When you get a chance, please email me a copy of the revision/addendum to the attached VW CAFE letter (and enter it into the Verify document module).

Thanks

**From:** [redacted] **Ex. 7**  
**Sent:** Thursday, December 26, 2013 9:05 AM

**To:** Good, David

**Cc:** French, Roberts;

**Ex. 7**

**Subject:** RE: 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter  
(30.7mpg) disagrees with Verify (33.674)

Hi Dave;

I checked the files and found that our letter you attached contained a typo, the correct Import Passenger Car CAFE reformed standard should be 33.7 MPG as you see from the Verify processing report, and not the 30.7 MPG. I will revise the letter, if you prefer, when I am back in the office on January 7<sup>th</sup>.

Happy New Year!

**Ex. 7**

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]

**Sent:** Monday, December 23, 2013 2:34 PM

**To:** Ex. 7

**Cc:** French, Roberts; Ex. 7 Snyder, Jim

**Subject:** 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter (30.7mpg)  
disagrees with Verify (33.674)

**Ex. 7**

While reviewing VW's 2012 Passenger Car CAFE letter & the data in Verify, I noticed a discrepancy in the VW letter (attached) and the Verify Report (attached) for the Import passenger car CAFE standard. Page 1 of VW letter indicates an Import Pass Car standard of 30.7 mpg while the Verify report indicates a manufacturer input CAFE standard of 33.674.

Your CAFE letter didn't supply the footprint standards calculations, so I can't double check the standard listed on page 1 of the letter.

Based on the footprint data which you entered into Verify, Verify calculated a CAFE standard of 33.7 mpg.

Please advise.

Thanks

# VOLKSWAGEN

GROUP OF AMERICA

Mr. Linc Wehrly  
Compliance and Innovative Strategies Division  
Light-Duty Vehicle Group  
U.S. Environmental Protection Agency  
2000 Traverwood Drive  
Ann Arbor, Michigan 48105

Mr. Oliver Schmidt Name  
General Manager Title  
EEO Department  
248 754 4201 Phone  
248 754 4207 Fax  
Oliver.Schmidt@vw.com E-Mail

January 7, 2014 Date

Subject: VOLKSWAGEN Group 2012 Final Passenger Car CAFE Reports - Revision

VOLKSWAGEN GROUP OF AMERICA, INC.  
3800 HAMLIN ROAD  
AUBURN HILLS, MI 48326  
PHONE +1 248 754 5000

Dear Mr. Wehrly;

With our letter of May 30, 2013 we submitted the Passenger Car 2012 report which contained a typographical error to the Import Passenger Car category reformed CAFE standard. The corrected version follows.

Enclosed is the manufacturer's calculation for the 2012 final fuel economy average. This calculation is provided for the VOLKSWAGEN Import and Domestic Passenger Car categories and in accordance to the regulations contained in 40 CFR 600.510-12. The final CAFE values are based upon approved EPA fuel economy data and final production volumes for the 2012 model year vehicles.

The Import Passenger Car category report has successfully been processed using the Verify system. The Baseline (Non-AMFA) CAFE adjusted value is 33.2 MPG. The adjusted CAFE with AMFA Credits included is 33.3 MPG. This value does not exceed the maximum cap and increase for 2012 of 1.2 MPG as specified in paragraph (h) of 40 CFR 600.510-12.

The calculated reformed CAFE Import category standard is 33.7 MPG, as specified in paragraph (c) of 49 CFR 531.5.

The Domestic Passenger Car category report has successfully been processed using the Verify system. The final CAFE value is 33.7 MPG.

The calculated reformed CAFE Domestic category standard is 32.1 MPG, as specified in paragraph (c) of 49 CFR 531.5.

The attachments to this letter contain the domestic content calculation as requested in the EPA certification mail-out CD-92-06. The Volkswagen Group of America, Inc. procedure for this calculation follows the procedure outlined in 40 CFR 600.511-08. Our procedure is described as follows:

- For vehicles produced outside of the NAFTA territory, the "declared value" of foreign components is basically, the ex factory value of each of the models which we have imported. The freight and insurance is added to this value and is labeled as "adjusted import value". The value of U.S. components has not been excluded because this value is included in the declared value upon importation of the vehicles. The "cost of production" as defined in the regulations equates to our wholesale price to the dealer.
- For vehicles produced within the NAFTA territory (Mexico), we followed the procedure established according to NAFTA Appendix 300-A.3, where Paragraph 1 states:

"For purposes of the Energy Policy and Conservation Act of 1975, 42 U.S.C. 6201...the United States shall consider an automobile to be domestically manufactured in any model year if at least 75 percent of the cost to the manufacturer of such automobile is attributable to value added in Canada, Mexico or the United States...Paragraph 1 shall apply beginning with the next model year after January 1, 2004, where the enterprise subject to the fuel economy requirements for those automobiles under the CAFE Act, has not made an election under subparagraph a)."

For purposes of paragraph 1, and according to 40 CFR 600.511-08, the ratio obtained in the domestic production determination was obtained from dividing the sum of the declared value (as defined in §600.502) of all of the imported components installed or included on automobiles produced within such a car line within a given model year plus the cost of transportation and insuring such components to the United States Port of entry, by the cost of production (as defined in §600.502) of all automobiles within such a car line.

The calculated results for each model are listed in the right column entitled CAFE Ratio. These values are clearly greater than the 0.25 ratio and therefore all Volkswagen Group carlines, with the exception of the Passat, are determined to be Import within the Import category Passenger Car report.

The Volkswagen Passat models are assembled in the Chattanooga, Tennessee USA manufacturing facility and are in the Domestic category Passenger Car report.

If you have any questions or require additional information, please contact me or Mr. Richard Thomas at (248) 754-4213.

Sincerely,  
VOLKSWAGEN Group of America, Inc.



Mr. Oliver Schmidt  
General Manager  
Engineering and Environmental Office

Attachments

**VWGoA Import Category Passenger Car Baseline**

INDEX #	Brand	Carline	Engine	DISP	Trans	CITY	HWY	COMB Round	Model Type Sales	Weighted Sales/MPG
52	Audi	A3	2.0L TDI	2.0 / 120	S6	39.0595	59.3797	46.2	3,887	84.1342
67	Audi	A3	2.0L TFSI	2.0 / 121	M6	25.3000	40.3000	30.4	641	21.0855
68	Audi	A3	2.0L TFSI	2.0 / 121	S6	26.6000	38.2000	30.8	2,126	69.0260
69	Audi	A3 quattro	2.0L TFSI	2.0 / 121	S6	27.2000	37.1000	30.9	633	20.4854
20	Audi	A4	2.0L TFSI	2.0 / 121	AV	29.2669	42.8335	34.1	5,031	147.5367
31	Audi	A4 Avant quattro	2.0L TFSI	2.0 / 121	S8	26.0806	39.7929	30.9	2,612	84.5307
33	Audi	A4 quattro	2.0L TFSI	2.0 / 121	M6	27.6280	42.4302	32.8	2,116	64.5122
29	Audi	A4 quattro	2.0L TFSI	2.0 / 121	S8	26.0806	39.7929	30.9	17,776	575.2751
21	Audi	A5 Cabriolet	2.0L TFSI	2.0 / 121	AV	29.2669	42.8335	34.1	618	18.1232
32	Audi	A5 Cabriolet quattro	2.0L TFSI	2.0 / 121	S8	26.0806	39.7929	30.9	3,007	97.3139
34	Audi	A5 quattro	2.0L TFSI	2.0 / 121	M6	27.6280	42.4302	32.8	826	25.1829
30	Audi	A5 quattro	2.0L TFSI	2.0 / 121	S8	26.0806	39.7929	30.9	5,758	186.3430
9	Audi	A6	2.0L TFSI	2.0 / 121	AV	31.4000	46.9000	36.9	2,222	60.2168
11	Audi	A6 quattro	3.0L TFSI	3.0 / 183	S8	23.1000	37.5000	27.9	16,152	578.9247
10	Audi	A7 quattro	3.0L TFSI	3.0 / 183	S8	22.9000	37.4000	27.7	11,768	424.8375
61	Audi	A8	4.2L V8 FSI	4.2 / 254	S8	21.7000	35.2000	26.2	563	21.4885
60	Audi	A8L	4.2L V8 FSI	4.2 / 254	S8	21.7000	35.2000	26.2	3,792	144.7328
16	Audi	A8L	6.3L W12	6.3 / 384	S8	16.7000	28.3000	20.5	183	8.9268
75	Audi	R8	4.2L V8 FSI	4.2 / 254	M6	13.6735	24.6004	17.1	109	6.3743
73	Audi	R8	4.2L V8 FSI	4.2 / 254	S6	16.0427	27.4569	19.7	121	6.1421
43	Audi	R8	5.2L V10	5.2 / 303	M6	13.7000	23.5099	16.9	212	12.5444
41	Audi	R8	5.2L V10	5.2 / 303	S6	15.5398	24.5419	18.6	372	20.0000
74	Audi	R8 Spyder	4.2L V8 FSI	4.2 / 254	M6	13.6735	24.6004	17.1	39	2.2807
66	Audi	R8 Spyder	4.2L V8 FSI	4.2 / 254	S6	16.0427	27.4569	19.7	48	2.4365
42	Audi	R8 Spyder	5.2L V10	5.2 / 303	M6	13.7000	23.5099	16.9	97	5.7396
40	Audi	R8 Spyder	5.2L V10	5.2 / 303	S6	15.5398	24.5419	18.6	274	14.7312
39	Audi	S4	3.0L TFSI	3.0 / 183	M6	21.5000	34.1000	25.8	1,093	42.3643
37	Audi	S4	3.0L TFSI	3.0 / 183	S7	21.6000	35.0000	26.1	2,943	112.7586
56	Audi	SS	4.2L V8 FSI	4.2 / 254	M6	17.3000	29.3000	21.2	504	23.7736
57	Audi	SS	4.2L V8 FSI	4.2 / 254	S6	20.4000	31.0000	24.1	1,909	79.2116
38	Audi	S5 Cabriolet	3.0L TFSI	3.0 / 183	S7	20.3000	34.0000	24.8	1,261	50.8468
70	Audi	TT Coupe quattro	2.0L TFSI	2.0 / 121	S6	28.1740	41.7865	33.0	1,261	38.2121
71	Audi	TT Roadster quattro	2.0L TFSI	2.0 / 121	S6	28.1740	41.7865	33.0	576	17.4545
80	Audi	TTRS Coupe	2.5L T	2.5 / 151	M6	21.2000	34.2000	25.6	422	16.4844
8	Bentley	Mulsanne	6.8L V8	6.8 / 412	S8	12.7000	23.4000	16.0	233	14.5625
12	Bentley - 8S	Continental Flying Spur	6.0L W12	6.0 / 366	S6	13.7000	24.6000	17.1	395	23.0994
14	Bentley - 8S	Continental GT	6.0L W12	6.0 / 366	S6	13.9000	24.7000	17.3	994	57.4566
88	Bentley - 8S	Continental GTC	6.0L W12	6.0 / 366	S6	13.7000	24.6000	17.1	589	34.4444
13	Bentley - 8S	Continental Supersports Convertible	6.0L W12	6.0 / 366	S6	13.9000	24.7000	17.3	82	4.7399
85	Bugatti	Veyron	V16	V16 / 488	L7	10.0000	17.9000	12.5	5	0.4000
7	Lamborghini	Aventador Coupe	6.5L V12	6.5 / 396	S7	12.5000	22.7000	15.7	252	16.0510
64	Lamborghini	Gallardo Coupe	5.2L Lamborghini	5.2 / 303	M6	14.0000	24.0000	17.2	1	0.0581
62	Lamborghini	Gallardo Coupe	5.2L Lamborghini	5.2 / 303	S6	16.1000	25.4000	19.3	153	7.9275
165	Lamborghini	Gallardo Spyder	5.2L Lamborghini	5.2 / 303	M6	13.0000	22.6000	16.1	3	0.1863
63	Lamborghini	Gallardo Spyder	5.2L Lamborghini	5.2 / 303	S6	16.0000	25.4000	19.2	128	6.6667
86	Volkswagen	Beetle	2.0L TFSI	2.0 / 121	M6	25.4597	41.4194	30.8	2,212	71.8182
45	Volkswagen	Beetle	2.0L TFSI	2.0 / 121	S6	26.5000	41.7262	31.7	7,397	233.3438
87	Volkswagen	Beetle	RS 2.5L SRE	RS / 151	M5	26.3336	42.6003	31.8	1,780	55.9748
25	Volkswagen	Beetle	RS 2.5L SRE	RS / 151	S6	27.1720	38.8543	31.4	19,083	607.7389
91	Volkswagen	Beetle Convertible	2.0L	2.0 / 121	S6	26.8000	40.6000	31.6	57	1.8038
90	Volkswagen	Beetle Convertible	RS 2.5L SRE	RS / 151	S6	26.3255	37.8827	30.5	93	3.0492
4	Volkswagen	CC	2.0L TFSI	2.0 / 121	M6	25.7135	41.7856	31.1	1,956	62.8939
3	Volkswagen	CC	2.0L TFSI	2.0 / 121	S6	27.0121	42.7212	32.4	27,179	838.8580
58	Volkswagen	CC 4MOTION	3.6L VR6 FSI	3.6 / 219	S6	20.5000	33.5000	24.8	215	8.6694
5	Volkswagen	Eos	2.0L TFSI	2.0 / 121	S6	27.5000	41.5000	32.4	11,140	343.8272
55	Volkswagen	Golf	2.0L TDI	2.0 / 120	M6	38.7780	60.3377	46.2	5,326	115.2814
51	Volkswagen	Golf	2.0L TDI	2.0 / 120	S6	39.0595	59.3797	46.2	5,939	128.5498
28	Volkswagen	Golf	RS 2.5L SRE	RS / 151	M5	26.2168	44.2259	32.1	2,407	74.9844
24	Volkswagen	Golf	RS 2.5L SRE	RS / 151	S6	27.6217	42.4798	32.8	8,713	265.6402
89	Volkswagen	Golf R	2.0L TFSI	2.0 / 121	M6	23.9000	37.1000	28.5	2,822	99.0175
46	Volkswagen	GTI	2.0L TFSI	2.0 / 121	M6	25.9213	41.0913	31.1	9,292	298.7781
44	Volkswagen	GTI	2.0L TFSI	2.0 / 121	S6	29.8054	43.2753	34.7	9,294	267.8386
79	Volkswagen	Jetta	2.0 MPI	2.0 / 121	M5	28.8000	46.2000	34.7	6,817	196.4553
78	Volkswagen	Jetta	2.0 MPI	2.0 / 121	S6	28.1000	41.4990	32.9	20,900	635.2584
54	Volkswagen	Jetta	2.0L TDI	2.0 / 120	M6	38.7780	60.3377	46.2	9,062	198.1472
50	Volkswagen	Jetta	2.0L TDI	2.0 / 120	S6	39.0595	59.3797	46.2	23,488	508.3983
27	Volkswagen	Jetta	RS 2.5L SRE	RS / 151	M5	26.2168	44.2259	32.1	7,410	230.8411
23	Volkswagen	Jetta	RS 2.5L SRE	RS / 151	S6	27.6217	42.4798	32.8	78,006	2,378.2317
18	Volkswagen	Jetta [GLI]	2.0L TFSI	2.0 / 121	M6	26.5443	45.0964	32.6	4,174	128.0368
17	Volkswagen	Jetta [GLI]	2.0L TFSI	2.0 / 121	S6	29.4666	44.8970	34.9	4,593	131.6046
53	Volkswagen	Jetta SportWagen	2.0L TDI	2.0 / 120	M6	38.7780	60.3377	46.2	3,758	81.3420
49	Volkswagen	Jetta SportWagen	2.0L TDI	2.0 / 120	S6	37.6000	56.2000	44.2	15,259	345.2262
26	Volkswagen	Jetta SportWagen	RS 2.5L SRE	RS / 151	M5	26.2168	44.2259	32.1	525	16.3551
22	Volkswagen	Jetta SportWagen	RS 2.5L SRE	RS / 151	S6	27.6217	42.4798	32.8	4,161	126.8598
84	Volkswagen	Tiguan	2.0L TFSI	2.0 / 121	M6	21.7000	35.8000	26.4	598	22.6515
83	Volkswagen	Tiguan	2.0L TFSI	2.0 / 121	S6	27.2963	37.1906	31.0	17,664	569.8065
VOLKSWAGEN GROUP Total Projected Units									405,107	12,294.9052
Baseline unadj unrounded w/o FFV (MPG)									32,9492	
Baseline unadj rounded w/o FFV (MPG)									32.9	

VWGoA Import Category Passenger Car AMFA

INDEX #	Brand	Carline	Engine	DISP	Trans	CITY	HWY	COMB Round	Model Type Sales	Weighted Sales/MPG
52	Audi	A3	2.0L TDI	2.0 / 120	S6	39.0595	59.3797	46.2	3,887	84.1342
67	Audi	A3	2.0L TFSI	2.0 / 121	M6	25.3000	40.3000	30.4	641	21.0855
68	Audi	A3	2.0L TFSI	2.0 / 121	S6	26.6000	38.2000	30.8	2,126	69.0260
69	Audi	A3 quattro	2.0L TFSI	2.0 / 121	S6	27.2000	37.1000	30.9	633	20.4854
20	Audi	A4	2.0L TFSI	2.0 / 121	AV	29.2669	42.8335	34.1	5,031	147.5367
31	Audi	A4 Avant quattro	2.0L TFSI	2.0 / 121	S8	26.0806	39.7929	30.9	2,612	84.5307
33	Audi	A4 quattro	2.0L TFSI	2.0 / 121	M6	27.6280	42.4302	32.8	2,116	64.5122
29	Audi	A4 quattro	2.0L TFSI	2.0 / 121	S8	26.0806	39.7929	30.9	17,776	575.2751
21	Audi	A5 Cabriolet	2.0L TFSI	2.0 / 121	AV	29.2669	42.8335	34.1	618	18.1232
32	Audi	A5 Cabriolet quattro	2.0L TFSI	2.0 / 121	S8	26.0806	39.7929	30.9	3,007	97.3139
34	Audi	A5 quattro	2.0L TFSI	2.0 / 121	M6	27.6280	42.4302	32.8	826	25.1829
30	Audi	A5 quattro	2.0L TFSI	2.0 / 121	S8	26.0806	39.7929	30.9	5,758	186.3430
9	Audi	A6	2.0L TFSI	2.0 / 121	AV	31.4000	46.9000	36.9	2,222	60.2168
11	Audi	A6 quattro	3.0L TFSI	3.0 / 183	S8	23.1000	37.5000	27.9	16,152	578.9247
10	Audi	A7 quattro	3.0L TFSI	3.0 / 183	S8	22.9000	37.4000	27.7	11,768	424.83/5
61	Audi	A8	4.2L V8 FSI	4.2 / 254	S8	21.7000	35.2000	26.2	563	21.4885
60	Audi	A8L	4.2L V8 FSI	4.2 / 254	S8	21.7000	35.2000	26.2	3,792	144.7328
16	Audi	A8L	6.3L W12	6.3 / 384	S8	16.7000	28.3000	20.5	183	8.9268
75	Audi	R8	4.2L V8 FSI	4.2 / 254	M6	13.6735	24.6004	17.1	109	6.3743
73	Audi	R8	4.2L V8 FSI	4.2 / 254	S6	16.0427	27.4569	19.7	121	6.1421
43	Audi	R8	5.2L V10	5.2 / 303	M6	13.7000	23.5099	16.9	212	12.5444
41	Audi	R8	5.2L V10	5.2 / 303	S6	15.5398	24.5419	18.6	372	20.0000
74	Audi	R8 Spyder	4.2L V8 FSI	4.2 / 254	M6	13.6735	24.6004	17.1	39	2.2807
66	Audi	R8 Spyder	4.2L V8 FSI	4.2 / 254	S6	16.0427	27.4569	19.7	48	2.4365
42	Audi	R8 Spyder	5.2L V10	5.2 / 303	M6	13.7000	23.5099	16.9	97	5.7396
40	Audi	R8 Spyder	5.2L V10	5.2 / 303	S6	15.5398	24.5419	18.6	274	14.7312
39	Audi	S4	3.0L TFSI	3.0 / 183	M6	21.5000	34.1000	25.8	1,093	42.3643
37	Audi	S4	3.0L TFSI	3.0 / 183	S7	21.6000	35.0000	26.1	2,943	112.7586
56	Audi	SS	4.2L V8 FSI	4.2 / 254	M6	17.3000	29.3000	21.2	504	23.7736
57	Audi	SS	4.2L V8 FSI	4.2 / 254	S6	20.4000	31.0000	24.1	1,909	79.2116
38	Audi	SS Cabriolet	3.0L TFSI	3.0 / 183	S7	20.3000	34.0000	24.8	1,261	50.8468
70	Audi	TT Coupe quattro	2.0L TFSI	2.0 / 121	S6	28.1740	41.7865	33.0	1,261	38.2121
71	Audi	TT Roadster quattro	2.0L TFSI	2.0 / 121	S6	28.1740	41.7865	33.0	576	17.4545
80	Audi	TTRS Coupe	2.5L T	2.5 / 151	M6	21.2000	34.2000	25.6	422	16.4844
8	Bentley	Mulsanne	6.8L V8	6.8 / 412	S8	12.7000	23.4000	16.0	233	14.5625
12	Bentley - 85	Continental Flying Spur	6.0L W12	6.0 / 366	S6	22.5270	40.5507	28.2	395	14.0071
14	Bentley - 85	Continental GT	6.0L W12	6.0 / 366	S6	23.1199	40.6448	28.7	994	34.6341
88	Bentley - 85	Continental GTC	6.0L W12	6.0 / 366	S6	22.5270	40.5507	28.2	589	20.8865
13	Bentley - 85	Continental Supersports Convertible	6.0L W12	6.0 / 366	S6	23.1199	40.6448	28.7	82	2.8571
85	Bugatti	Veyron	V16	V16 / 488	L7	10.0000	17.9000	12.5	5	0.4000
7	Lamborghini	Aventador Coupe	6.5L V12	6.5 / 396	S7	12.5000	22.7000	15.7	252	16.0510
64	Lamborghini	Gallardo Coupe	5.2L Lamborghini	5.2 / 303	M6	14.0000	24.0000	17.2	1	0.0581
62	Lamborghini	Gallardo Coupe	5.2L Lamborghini	5.2 / 303	S6	16.1000	25.4000	19.3	153	7.9275
165	Lamborghini	Gallardo Spyder	5.2L Lamborghini	5.2 / 303	M6	13.0000	22.6000	16.1	3	0.1863
63	Lamborghini	Gallardo Spyder	5.2L Lamborghini	5.2 / 303	S6	16.0000	25.4000	19.2	128	6.6667
86	Volkswagen	Beetle	2.0L TFSI	2.0 / 121	M6	25.4597	41.4194	30.8	2,212	71.8182
45	Volkswagen	Beetle	2.0L TFSI	2.0 / 121	S6	26.5000	41.7262	31.7	7,397	233.3438
87	Volkswagen	Beetle	RS 2.5L SRE	RS / 151	M5	26.3336	42.6003	31.8	1,780	55.9748
25	Volkswagen	Beetle	RS 2.5L SRE	RS / 151	S6	27.1720	38.8543	31.4	19,083	607.7389
91	Volkswagen	Beetle Convertible	2.0L	2.0 / 121	S6	26.8000	40.6000	31.6	57	1.8038
90	Volkswagen	Beetle Convertible	RS 2.5L SRE	RS / 151	S6	26.3255	37.8827	30.5	93	3.0492
4	Volkswagen	CC	2.0L TFSI	2.0 / 121	M6	25.7135	41.7856	31.1	1,956	62.8939
3	Volkswagen	CC	2.0L TFSI	2.0 / 121	S6	27.0121	42.7212	32.4	27,179	838.8580
58	Volkswagen	CC 4MOTION	3.6L VR6 FSI	3.6 / 219	S6	20.5000	33.5000	24.8	215	8.6694
5	Volkswagen	Eos	2.0L TFSI	2.0 / 121	S6	27.5000	41.5000	32.4	11,140	343.8272
55	Volkswagen	Golf	2.0L TDI	2.0 / 120	M6	38.7780	60.3377	46.2	5,326	115.2814
51	Volkswagen	Golf	2.0L TDI	2.0 / 120	S6	39.0595	59.3797	46.2	5,939	128.5498
28	Volkswagen	Golf	RS 2.5L SRE	RS / 151	M5	26.2168	44.2259	32.1	2,407	74.9844
24	Volkswagen	Golf	RS 2.5L SRE	RS / 151	S6	27.6217	42.4798	32.8	8,713	265.6402
89	Volkswagen	Golf R	2.0L TFSI	2.0 / 121	M6	23.9000	37.1000	28.5	2,822	99.0175
46	Volkswagen	GTI	2.0L TFSI	2.0 / 121	M6	25.9213	41.0913	31.1	9,292	298.7781
44	Volkswagen	GTI	2.0L TFSI	2.0 / 121	S6	29.8054	43.2753	34.7	9,294	267.8386
79	Volkswagen	Jetta	2.0 MPI	2.0 / 121	M5	28.8000	46.2000	34.7	6,817	196.4553
78	Volkswagen	Jetta	2.0 MPI	2.0 / 121	S6	28.1000	41.4990	32.9	20,900	635.2584
54	Volkswagen	Jetta	2.0L TDI	2.0 / 120	M6	38.7780	60.3377	46.2	9,062	196.1472
50	Volkswagen	Jetta	2.0L TDI	2.0 / 120	S6	39.0595	59.3797	46.2	23,488	508.3983
27	Volkswagen	Jetta	RS 2.5L SRE	RS / 151	M5	26.2168	44.2259	32.1	7,410	230.8411
23	Volkswagen	Jetta	RS 2.5L SRE	RS / 151	S6	27.6217	42.4798	32.8	78,006	2,378.2317
18	Volkswagen	Jetta [GL]	2.0L TFSI	2.0 / 121	M6	26.5443	45.0964	32.6	4,174	128.0368
17	Volkswagen	Jetta [GL]	2.0L TFSI	2.0 / 121	S6	29.4666	44.8970	34.9	4,593	131.6046
53	Volkswagen	Jetta SportWagen	2.0L TDI	2.0 / 120	M6	38.7780	60.3377	46.2	3,758	81.3420
49	Volkswagen	Jetta SportWagen	2.0L TDI	2.0 / 120	S6	37.6000	56.2000	44.2	15,259	345.2262
26	Volkswagen	Jetta SportWagen	RS 2.5L SRE	RS / 151	M5	26.2168	44.2259	32.1	525	16.3551
22	Volkswagen	Jetta SportWagen	RS 2.5L SRE	RS / 151	S6	27.6217	42.4798	32.8	4,161	126.8598
84	Volkswagen	Tiguan	2.0L TFSI	2.0 / 121	M6	21.7000	35.8000	26.4	598	22.6515
83	Volkswagen	Tiguan	2.0L TFSI	2.0 / 121	S6	27.2963	37.1906	31.0	17,664	569.8065
VOLKSWAGEN GROUP Total Projected Units								405,107	12,247.5497	
AMFA unadj unrounded with FFV (MPG)								33,0766		
AMFA unadj rounded with FFV (MPG)								33.1		

VWGoA Domestic Category Passenger Car

**Ex. 4 - CBI**

**Ex. 4 - CBI**

# **Ex. 4 - CBI**

**Ex. 4 - CBI**

# **Ex. 4 - CBI**

**To:** Good, David[good.david@epa.gov]  
**From:** [redacted] Ex. 7  
**Sent:** Thur 1/2/2014 8:37:51 PM  
**Subject:** Automatic reply: 2012 CAFE VW Model Year Report -Import Pass Car CAFE standard in VW letter (30.7mpg) disagrees with Verify (33.674)

[redacted] **Ex. 7** [redacted] is currently away from the office, and will be returning on Monday, January 6, 2014.

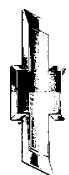
**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 9/24/2015 2:08:24 PM  
**Subject:** 2014 Volt (non-blended) and Ford Fusion PHEV (blended) and Panamera (blended) and Cayenne non-blended) Labels attached  
[2014 volt label image-from GM-6-10-2013.pdf](#)  
[2014 Porsche Panamera PHEV FE Label-from Ross-3-31-2014.pdf](#)  
[Cayenne S e-Hybrid Monroney Label 2015-from Ross-10-15-2014.pdf](#)  
[2015 Fusion Energi \(PHEV\) label-from Ford-7-7-2014.pdf](#)

Richard,

Here are some examples for you.

Note that the Fusion/C-Max PHEVs are “blended” but the gasoline engine doesn’t come on during UDDS & hwy tests----so the label shows 0.0 kw-hr/100 mi during charge depleting operation.

Dave



**CHEVROLET** 2014 CHEVROLET VOLT

EXTERIOR:  
INTERIOR:

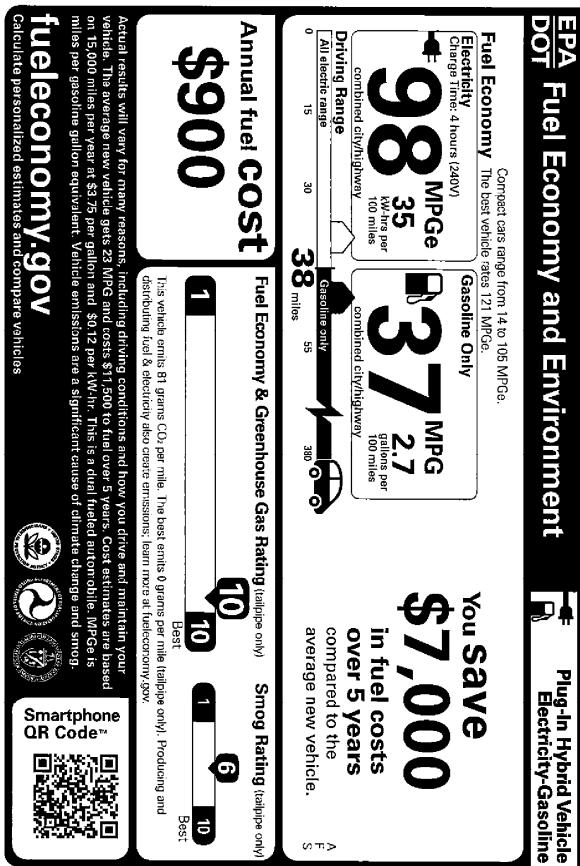
# THIS IS A TEST LABEL

Visit us at [www.chevy.com](http://www.chevy.com)

► PULL THIS STRIP TO EXPOSE ADHESIVE

**THIS VEHICLE IS NOT FOR SALE, NOR SHOULD IT BE DISPLAYED UNTIL A MANUFACTURER'S PRICE LABEL WITH COMPLETE SUGGESTED RETAIL PRICE INFORMATION IS AFFIXED.**

**THIS LABEL IS AFFIXED FOR SHIPPING PURPOSES ONLY BECAUSE COMPLETE VEHICLE PRICING INFORMATION WAS NOT AVAILABLE AT TIME OF SHIPMENT.**



GOVERNMENT 5-STAR SAFETY RATINGS		PARTS' CONTENT INFORMATION
FOR VEHICLES IN THIS CARLINE: U.S./CANADIAN PARTS CONTENT: 45%		MAJOR SOURCES OF FOREIGN PARTS CONTENT: JAPAN 17% KOREA 19%
NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL ASSEMBLY, DISTRIBUTION, OR OTHER NON-PARTS COSTS.	FOR THIS VEHICLE: FINAL ASSEMBLY POINT: DETROIT, MI U.S.A.	NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL ASSEMBLY, DISTRIBUTION, OR OTHER NON-PARTS COSTS.
ENGINE: UNITED STATES DRIVE UNIT: JAPAN	TRANSMISSION (ELECTRIC)	THE label has been applied pursuant to section 5202 of the Motor Vehicle Safety Recalls Act of 1990. It is intended to identify the manufacturer of the vehicle and the source of parts used in its manufacture. It does not include dealer installed options, factory or dealer service, or parts used above the final assembly point.
SOURCE: National Highway Traffic Safety Administration (NHTSA) <a href="http://www.safercar.gov">www.safercar.gov</a> or 1-888-327-4236		© 2014 General Motors LLC GM140727-002-007/17/2013

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Customer No. GM140727 Sales Code: N  
Final Assembly: U.S.A.  
Detroit, MI  
VIN: 1G1RDSE4TEU104679  
Dealer to whom delivered  
GENERAL MOTORS LLC  
3300 GM RD BLDG 12 MC 483-312-00  
MILFORD, MI 48380-3727

# EPA DOT Fuel Economy and Environment

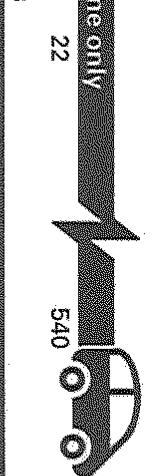
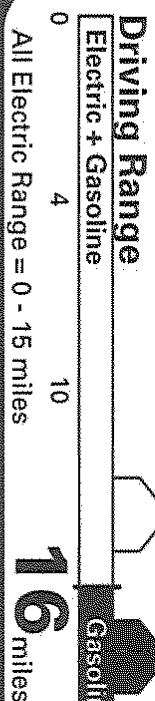
Plug-In Hybrid Vehicle  
Electricity-Gasoline

Fuel Economy Large Cars range from 14 to 29 MPG. The best vehicle rates 119 MPGe.

Electricity + Gasoline  
Charge Time: 3 hours (240V)

 **50** MPG  
0.5 gallons per 100 miles  
kW-hrs per 100 miles

 **25** MPG  
4.0 gallons per 100 miles



You save **\$2,250** in fuel costs over 5 years compared to the average new vehicle.

## Annual fuel cost

Fuel Economy & Greenhouse Gas Rating (tailpipe only) Smog Rating (tailpipe only)

MPG **8**



**10** Best



**10** Best



**\$1,850**

This vehicle emits 206 grams CO<sub>2</sub> per mile. The best emits 0 grams per mile (tailpipe only). Producing and distributing fuel also create emissions; learn more at [fueleconomy.gov](http://fueleconomy.gov).

Actual results will vary for many reasons, including driving conditions and how you drive and maintain your vehicle. The average new vehicle gets 23 MPG and costs \$11,500 to fuel over 5 years. Cost estimates are based on 15,000 miles per year \$3.75 per gallon and \$0.12 per kW-hr. This is a dual fueled automobile. MPGe is miles per gasoline gallon equivalent. Vehicle emissions are a significant cause of climate change and smog.

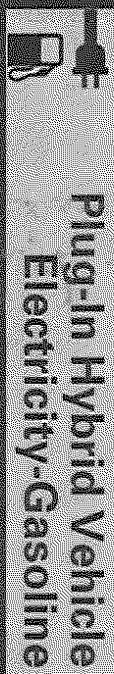
**fueleconomy.gov**

Calculate personalized estimates and compare vehicles

Smartphone QR Code



# EPA DOT Fuel Economy and Environment

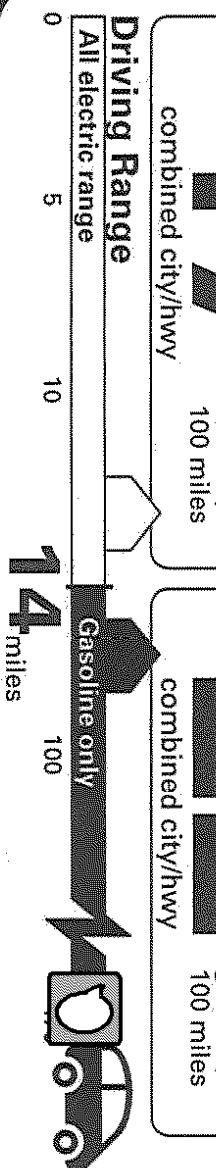
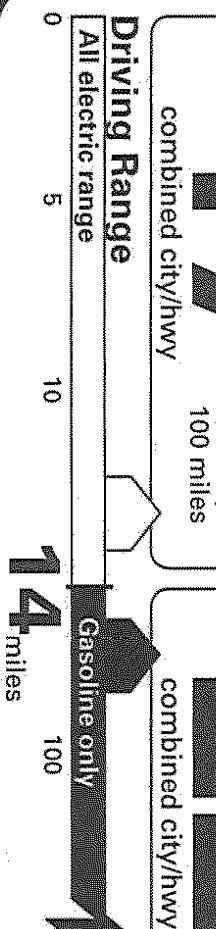


**Fuel Economy** Standard SUVs range from 13 to 26 MPG. The best vehicle rates 119 MPGe.

**Electricity**  
Charge Time: 2 hours (240V)

**47 MPGe**  
kW-hrs per  
100 miles

**22 MPG**  
gallons per  
100 miles

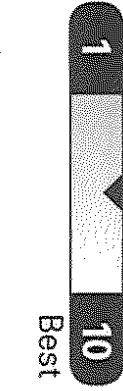
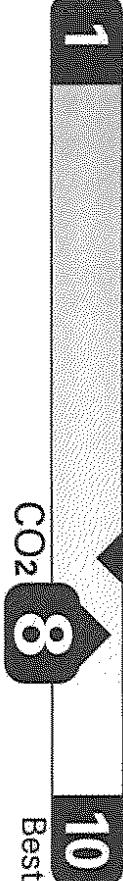


**You Save**  
**\$500**  
in fuel costs  
over 5 years  
compared to the  
average new vehicle.

## Annual fuel cost

**\$2,100**

**Fuel Economy & Greenhouse Gas Rating** (tailpipe only) **Smog Rating** (tailpipe only)



This vehicle emits 260 grams CO<sub>2</sub> per mile. The best emits 0 grams per mile (tailpipe only). Producing and distributing fuel also create emissions; learn more at [fuelconomy.gov](http://fuelconomy.gov).

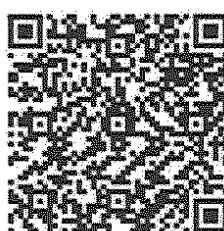
Actual results will vary for many reasons, including driving conditions and how you drive and maintain your vehicle. The average new vehicle gets 24 MPG and costs \$11,000 to fuel over 5 years. Cost estimates are based on 15,000 miles per year \$3.80 per gallon and \$0.12 per kW-hr. This is a dual fueled automobile. MPGe is miles per gasoline gallon equivalent. Vehicle emissions are a significant cause of climate change and smog.

**fualeconomy.gov**

Calculate personalized estimates and compare vehicles



Smartphone QR Code





**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 9/3/2015 1:54:15 PM  
**Subject:** RE: 2016 FE Guide - Data in Verify as of 9/2/2015 10AM  
VW\_Group\_2016 FE Guide-all rel dates-no-sales-8-20-2015.xlsx

Richard,

The 2016 e-Golf is posted on the web---it didn't have any errors. I sent you the data on 8/20/2015 for your review for the 2016 Printed Guide---copy attached. It's in a different tab from the conventional vehicles.

Dave

Davc

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Thursday, September 03, 2015 7:35 AM  
**To:** Good, David  
**Subject:** RE: 2016 FE Guide - Data in Verify as of 9/2/2015 10AM

Hi Dave;

I noticed that I have not seen the BEV Volkswagen e-Golf on your spreadsheet listing since the end of July. [REDACTED]

Ex. 4 - CBI

**Ex. 4 - CBI**

Thanks,

Richard

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Wednesday, September 02, 2015 5:28 PM  
**To:** Thomas, Richard (EEO) <[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)>  
**Subject:** 2016 FE Guide - Data in Verify as of 9/2/2015 10AM

Richard,

Per your voicemail.

**Ex. 4 - CBI**

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Tue 9/1/2015 5:24:48 PM  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of 6AM on Sept 1, 2015; Last day to make changes for the 2016 Printed Guide is Sept 1, 2015  
VW Group 2016 FE Guide-all rel dates-no-sales-9-1-2015.xlsx

Richard,

Re: 2016 FE Guide - Errors in Verify as of 6AM on Sept 1, 2015; Last day to make changes for the 2016 Printed Guide is Sept 1, 2015

**Printed Guide** – For the 2016 Printed Guide, I will send all error-free data in Verify to DOE on September 2, 2015, regardless of release date. The data will not be released outside of EPA & DOE offices until the week of November 16, 2015, when 2016 Printed Guides are scheduled to be mailed to dealerships, libraries and credit unions. Please email me if there are data in Verify which you do not want included in the 2016 Printed Guide.

Attached are the data in Verify as of 6AM on Sept 1, 2015. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on www.fueleconomy.gov or included in the 2016 Printed Guide.

Please make any needed corrections to Verify before COB Sept 1, 2015.

Thanks

Dave

**To:** Ex. 7 @vw.com]  
**Cc:** Ex. 7 @vw.com]  
**From:** Good, David  
**Sent:** Mon 8/31/2015 10:53:25 PM  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of 6AM on August 31, 2015; Last day to make changes for the 2016 Printed Guide is Sept 1, 2015  
VW Group 2016 FE Guide-all rel dates-no-sales-8-31-2015.xlsx

Ex. 7

Re: 2016 FE Guide - Errors in Verify as of 6AM on August 31, 2015; Last day to make changes for the 2016 Printed Guide is Sept 1, 2015

**Printed Guide** – For the 2016 Printed Guide, I will send all error-free data in Verify to DOE on September 2, 2015, regardless of release date. The data will not be released outside of EPA & DOE offices until the week of November 16, 2015, when 2016 Printed Guides are scheduled to be mailed to dealerships, libraries and credit unions. Please email me if there are data in Verify which you do not want included in the 2016 Printed Guide.

Attached are the data in Verify as of 6AM on August 31, 2015. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov) or included in the 2016 Printed Guide.

Please make any needed corrections to Verify before COB Sept 1, 2015.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Thur 8/27/2015 10:16:47 PM  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of 4PM on August 27, 2015  
VW Group 2016 FE Guide-all rel dates-no-sales-8-27-2015.xlsx

Richard,

Re: 2016 FE Guide - Errors in Verify as of 4PM on August 27, 2015

I did another query of the data in Verify as of 4PM today---to help manufacturers correct errors on any new entries.

Attached are the data in Verify as of 6AM on August 27, 2015. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 & 2016 FE Label data will be on September 2, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later). This is the same day which I will send the data in Verify to DOE for the 2016 Printed Guide.

Please make any needed corrections to Verify when you get a chance.

**Using the 2017 Derived 5-Cycle Equation for 2016MY Vehicles:** If you are voluntarily using the 2017 derived 5-cycle equations for any 2016 model year vehicles, please send me the 2016 Index number(s) of the affected vehicles so I can build them into the macro.

**Placeholders for the 2016 Printed Guide are due to EPA on Aug 20, 2015:** If you haven't already done so, please send me an Excel spreadsheet with any fuel cell vehicles, EVs, HEVs, PHEVs, FFVs and any other alternative fuel vehicles which won't be labeled in Verify by September 1, 2015. [Please don't include placeholder information for vehicles which are already in EPA's Verify database (or will be in Verify by September 1, 2015.) See Enclosure 2, Section 3 of EPA Guidance letter CD-15-16 for additional information.]

Thanks

Dave

**To:** [REDACTED] Ex. 7 @vw.com]  
**Cc:** [REDACTED] Ex. 7 @vw.com]; Snyder, Jim[Snyder.Jim@epa.gov] [REDACTED] Ex. 7  
[REDACTED] Ex. 7 @vw.com]  
**From:** Good, David  
**Sent:** Wed 8/26/2015 6:48:30 PM  
**Subject:** RE: 2016 Printed FE Guide - Data in EPA's database as of Aug 20, 2015 6AM is attached for your review; On Sept 2, 2015 I will send error free Verify data to DOE for the 2016 Printed Guide

## Ex. 4 - CBI

[REDACTED] Ex. 7

Attached are the 2016 FE Guide data (where Index 100 uses the 2017 derived 5-cycle equation) and my edits to your 2016 placeholder file (FYI).

## Ex. 4 - CBI

Let me know if you see any problems with my edits to your Placeholders.

Dave

**From:** [REDACTED] Ex. 7 @vw.com]  
**Sent:** Wednesday, August 26, 2015 7:11 AM  
**To:** Good, David  
**Cc:** [REDACTED] Ex. 7 (EEO); Snyder, Jim [REDACTED] Ex. 7 (EEO)  
**Subject:** RE: 2016 Printed FE Guide - Data in EPA's database as of Aug 20, 2015 6AM is attached for your review; On Sept 2, 2015 I will send error free Verify data to DOE for the 2016 Printed Guide

Hi Dave;

## Ex. 4 - CBI

## **Ex. 4 - CBI**

If you have any questions, please let me know.

Best regards,

**Ex. 7**

**Ex. 7**

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

**Ex. 7**

Fax: 248 754 4207

mailto:

**Ex. 7**

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]

**Sent:** Friday, August 21, 2015 10:47 AM

**To:** [@vw.com>](mailto:@vw.com)

**Cc:** [@vw.com>; Snyder, Jim <\[Snyder.Jim@epa.gov\]\(mailto:Snyder.Jim@epa.gov\)>](mailto:@vw.com)

**Subject:** re: 2016 Printed FE Guide - Data in EPA's database as of Aug 20, 2015 6AM is attached for your review; On Sept 2, 2015 I will send error free Verify data to DOE for the 2016 Printed Guide

**Ex. 7**

re: 2016 Printed FE Guide - Data in EPA's database as of Aug 20, 2015 6AM is attached for your review; On Sept 2, 2015 I will send error free Verify data to DOE for the 2016 Printed Guide

Attached are the data in Verify as of August 20, 2015 6AM. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov) or included in the 2016 Printed Guide. Note that there are separate tabs for EV, PHEV, and fuel cell vehicles (if applicable). Please make any needed corrections to Verify when you get a chance. Please enter new data in Verify for any missing labels.

-

**Printed Guide** – For the 2016 Printed Guide, I will send all error-free data in Verify to DOE on September 2, 2015, regardless of release date. The data will not be released outside of EPA & DOE offices until the week of November 16, 2015, when 2016 Printed Guides are scheduled to be mailed to dealerships, libraries and credit unions, ref. EPA guidance letter CD-15-16, July 20, 2015. Please email me if there are data in Verify which you do not want included in the 2016 Printed Guide.

**Next Web Update** - The next normal posting of 2015 & 2016 FE Label data will be on August 25, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later). Again on September 2, 2015, I'll send the error-free data in Verify (which is releasable) to DOE to update [www.fueleconomy.gov](http://www.fueleconomy.gov), business-as-usual.

**Using the 2017 Derived 5-Cycle Equation for 2016MY Vehicles:** If you are voluntarily using the 2017 derived 5-cycle equations for any 2016 model year vehicles, please send me the 2016 Index number(s) of the affected vehicles so I can build them into the macro. See EPA Guidance Letter CD-15-15, June 22, 2015 for additional information about the revised derived 5-cycle equation.

**Placeholders for the 2016 Printed Guide are due to EPA on Aug 20, 2015:** If you haven't already done so, please send me an Excel spreadsheet with any fuel cell vehicles, EVs, HEVs, PHEVs, FFVs and any other alternative fuel vehicles which won't be labeled in Verify by September 1, 2015. [Please don't include placeholder information for vehicles which are already in EPA's Verify database (or will be in Verify by September 1, 2015).] See Enclosure 2, Section 3 of EPA Guidance letter CD-15-16 for additional information about placeholders.

Reminders:

- Please double check the attached data in Verify for accuracy, missing labels, etc.
- September 1, 2015 is the last day to make changes for the 2016 Printed Guide.
- If you enter new label data into Verify before September 2, 2015, please double check it carefully for accuracy.

Please send me a short email when your 2016 FE Label data in Verify are "good to go."

Please send me your placeholder spreadsheet as soon as possible.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 8/13/2015 7:32:07 PM  
**Subject:** 2016 FE Label data attached  
VW\_Group\_2016 FE Guide-all rel dates-no-sales-8-12-2015.xlsx

Richard,

Here you go—it has a tab for the e Golf.

Dave

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 7/30/2015 1:21:45 PM  
**Subject:** RE: Confirmatory Test Thresholds/Cut Points

Richard,

I sent the DRAFT revised cut point guidance letter around for EPA internal review yesterday. Hopefully, we can get EPA buy-off in a week and OGC approval in another week and get the letter out by mid-to late August.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, July 29, 2015 2:35 PM  
**To:** Good, David  
**Subject:** Confirmatory Test Thresholds/Cut Points

Hi Dave;

I thought that recently you told me that you were assigned the job of creating new threshold values for confirmatory testing. Are you making any progress toward establishing new cut points to replace these very old criteria?

Just wondering when we can expect new cut points. It seems now a days everything that is not confirmed by EPA must get manufacture's confirmatory tests, and we have test capacity problems so that some of our US confirmatory testing gets pushed aside by the factory labs to test vehicles for other countries.

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** [REDACTED] **Ex. 7**  
**From:** Good, David  
**Sent:** Wed 7/29/2015 3:05:48 PM  
**Subject:** RE: [REDACTED] Ex. 7 Fw: Reactivation of 2016 Volkswagen Label Index #073 (HLP-6478) - 2016 FE Label data attached  
[VW Group 2016 FE Guide-all rel dates-no-sales-7-28-2015.xlsx](#)

[REDACTED] **Ex. 7**

Here is the 2016 FE Label data as of 6AM this morning (7/28). As expected, the macro flagged some errors for Index 85. Please ignore the e-Golf errors.

Dave

**From:** [REDACTED] **Ex. 7**  
**Sent:** Wednesday, July 29, 2015 7:52 AM  
**To:** Verify Help Desk  
**Cc:** Good, David; [REDACTED] **Ex. 7**  
**Subject:** RE: [REDACTED] Ex. 7 Fw: Reactivation of 2016 Volkswagen Label Index #073 (HLP-6478)

Hi [REDACTED] **Ex. 7**:

I submitted this VGA index #073 again as new this morning with a release date of July 30<sup>th</sup>. It was accepted.

Thank you and best regards,

[REDACTED]  
**Ex. 7**

Volkswagen Group of America, Inc.

# Ex. 7

**From:** [REDACTED] Ex. 4 - CBI **On Behalf Of** Verify Help Desk  
**Sent:** Tuesday, July 28, 2015 7:06 PM  
**To:** [REDACTED] Ex. 7  
**Cc:** 'Good.David@epamail.epa.gov', [REDACTED] Ex. 7  
**Subject:** RE: [REDACTED] Ex. 7 Fw: Reactivation of 2016 Volkswagen Label Index #073 (HLP-6478)

Hello Mr. [REDACTED] Ex. 7

We have consulted with our EPA manager and would like you to submit this Model Type Index again as 'New'. Please let us know if you have any further question or issues.

[REDACTED] Ex. 4 - CBI

Verify Help Desk

[REDACTED] Ex. 4 - CBI

Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

[redacted] Ex. 7 [redacted]

07/28/2015 02:39 PM

To: Verify Help Desk@[Ex. 4 - CBI](#)  
cc:"Good.David@epamail.epa.gov" <Good.David@epamail.epa.gov> [redacted] Ex. 7  
Subject: RE: [redacted] Ex. 7 Fw: Reactivation of 2016 Volkswagen Label Index #073  
(HLP-6478)

Great, thank you [redacted]  
Ex. 4 - CBI

**From:** [redacted] Ex. 4 - CBI **On Behalf Of** Verify Help Desk  
**Sent:** Tuesday, July 28, 2015 2:37 PM  
**To:** [redacted] Ex. 7  
**Cc:** 'Good.David@epamail.epa.gov'; [redacted] Ex. 7  
**Subject:** Re: [redacted] Fw: Reactivation of 2016 Volkswagen Label Index #073 (HLP-6478)

Hello Mr. [redacted] Ex. 7

Verify help desk ticket HLP-6478 was opened for your inquiry. We will request EPA authorization to include this update in our next database updates release this Thursday, July 30.

[redacted] Ex. 4 - CBI

Verify Help Desk  
[redacted] Ex. 4 - CBI  
Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

[redacted] Ex. 4 - CBI

07/28/2015 02:31 PM

To: [verifyhelp@Ex. 4 - CBI](#)  
cc [redacted]  
Subject: [redacted] Ex. 7 Fw: Reactivation of 2016 Volkswagen Label Index #073

---- Forwarded by [redacted] Ex. 4 - CBI [redacted] on 07/28/2015 02:30 PM ----

From: [redacted] Ex. 7 [redacted]@vw.com>  
To: [redacted] Ex. 4 - CBI [redacted]  
Cc: "Good.David@epamail.epa.gov" <Good.David@epamail.epa.gov>, [redacted] Ex. 7 [redacted]@vw.com>  
Date: 07/28/2015 02:11 PM  
Subject: Reactivation of 2016 Volkswagen Label Index #073

---

Hello [redacted] Ex. 4 - CBI [redacted];

I'm sorry to have to do this but one of the labels indexes we asked to make inactive will have to become active again. I talked to Dave Good who told me to contact the help desk to make that happen. It was VGA label index # 073 for the Jetta 1.8L manual 5-speed transmission. There was some miscommunication between our certification group and the marketing types in our corporate headquarters in Herndon Virginia.

Please make VGA index #073 active again, it can be immediately released for the guide. If you need me to do anything in the Verify labeling program please let me know.

Best regards,

[redacted]  
**Ex. 7**

Volkswagen Group of America, Inc.

[redacted]  
**Ex. 7**

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Wed 7/22/2015 6:33:37 PM  
**Subject:** RE: 2016 Passat 3.6L still on website [It's been pulled.] NNTO

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, July 22, 2015 11:12 AM  
**To:** Good, David  
**Subject:** 2016 Passat 3.6L still on website

Hi Dave;

I just wanted to let you know that I check the fuel economy guide website and that 2016 Passat 3.6L (label index VGA #067) is still up. If you have time today, could you please follow up with the contractor to take it down until September.

Thanks,

Richard

Richard E. Thomas  
Senior Emission Certification Specialist  
Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** [REDACTED] **Ex. 7**  
**From:** Good, David  
**Sent:** Mon 7/20/2015 5:47:25 PM  
**Subject:** RE: Release Date Change question

[REDACTED] **Ex. 7**

Yes, go ahead and revise the release date.

Dave

**From:** [REDACTED] **Ex. 7**  
**Sent:** Monday, July 20, 2015 1:20 PM  
**To:** Good, David  
**Cc:** [REDACTED] **Ex. 7**  
**Subject:** Release Date Change question

Hi Dave;

I was just informed by our marketing department that our face lifted Passat for 2016 will not be offered until later this year. I had already labeled the 2016 Passat equipped with the 3.6L VR6 gasoline engine. Which at that time had a release date of July 13<sup>th</sup>. So the model now appears on the guide website. Is it possible to change the release date now to September 23<sup>rd</sup> and not send the label VGA index #067 to the contractor on the next update? The marketing types would rather not have the Passat listed on the fuel economy guide website until it's market introduction. Let me know your thoughts. Perhaps you can give me a call on Tuesday.

Thanks,

[REDACTED]  
**Ex. 7**

**Ex. 7**

Volkswagen Group of America, Inc.

**Ex. 7**

**To:** [REDACTED] Ex. 4 - CBI  
**Cc:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]; Danzeisen, Karen[Danzeisen.Karen@epa.gov]  
**From:** Good, David  
**Sent:** Thur 7/16/2015 1:12:32 PM  
**Subject:** RE: 2016 Inactive Fuel Economy Labels Volkswagen

[Ex. 4 - CBI]

I agree with Richard's request for two more labels----you have my approval to make those indexes inactive when you get a chance. That will make a total of 4 indexes to make inactive.

Thanks

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Thursday, July 16, 2015 8:56 AM  
**To:** [REDACTED] Ex. 4 - CBI  
**Cc:** Good, David  
**Subject:** 2016 Inactive Fuel Economy Labels Volkswagen

Hi [Ex. 4 - CBI]

I have two more 2016 labels that need to change to inactive status in Verify. Volkswagen cancelled the manual 5-speed transmission for the 1.8L Jetta and 1.8L Passat, VGA label indexes #073 and #075 respectively. Please make these two 2016 label indexes inactive.

Best regards,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

<mailto:Richard.Thomas@VW.com>

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 7/16/2015 12:42:36 PM  
**Subject:** RE: 2016 FE Guide - Errors in Verify as of July 15, 2015; please have the Verify help desk delete (make inactive) 2016 Indexes 10 and 24

Richard,

Yes, please send an email to the Verify help desk to have them delete (make inactive) indexes 73 & 75 (and cc me).

Thanks

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Thursday, July 16, 2015 7:13 AM  
**To:** Good, David  
**Subject:** RE: 2016 FE Guide - Errors in Verify as of July 15, 2015; please have the Verify help desk delete (make inactive) 2016 Indexes 10 and 24

Hi Dave;

I have made the CO2 correction to index #076, and have requested of the Verify help desk, that the two Audi labels #010 and #024 be made inactive.

I also sent you an email about two Volkswagen models that were labeled but have now been cancelled. They are manual 5-speed transmission configurations of the 1.8L Jetta and 1.8L Passat, indexes #073 and #075 respectively. They however, have never been released for the guide. Let me know if I should also write to Verify help and have them made inactive also.

Best regards,

Richard

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Wednesday, July 15, 2015 5:56 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of July 15, 2015; please have the Verify help desk delete (make inactive) 2016 Indexes 10 and 24

Richard,

Re: 2016 FE Guide - Errors in Verify as of July 15, 2015

Attached are the data in Verify as of July 15, 2015. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 & 2016 FE Label data will be on July 23, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Also, when you get a chance, please email the Verify help desk, and ask them to delete (make inactive) 2016 Indexes 10 and 24. Please cc me as I have to approve it.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Wed 7/15/2015 9:56:13 PM  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of July 15, 2015; please have the Verify help desk delete (make inactive) 2016 Indexes 10 and 24  
VW Group 2016 FE Guide-all rel dates-no-sales-7-15-2015.xlsx

Richard,

Re: 2016 FE Guide - Errors in Verify as of July 15, 2015

Attached are the data in Verify as of July 15, 2015. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 & 2016 FE Label data will be on July 23, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Also, when you get a chance, please email the Verify help desk, and ask them to delete (make inactive) 2016 Indexes 10 and 24. Please cc me as I have to approve it.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Fri 7/10/2015 9:16:04 PM  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of July 10, 2015  
VW Group 2016 FE Guide-all rel dates-no-sales-7-10-2015.xlsx

Richard,

Re: 2016 FE Guide - Errors in Verify as of July 10, 2015

Attached are the data in Verify as of July 10, 2015. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 & 2016 FE Label data will be on July 15, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** [REDACTED]  
**Cc:** [REDACTED]  
**From:** Good, David  
**Sent:** Thur 7/9/2015 10:36:09 PM  
**Subject:** RE: 2016 Audi Labels to be Suppressed from Fuel Economy Guide

**Ex. 7**

[REDACTED] **Ex. 7**

I didn't have time to run the FE Guide query. Will send you the data on Friday.

Dave

**From:** [REDACTED] **Ex. 7**  
**Sent:** Thursday, July 09, 2015 1:39 PM  
**To:** Good, David  
**Cc:** [REDACTED] **Ex. 7**  
**Subject:** 2016 Audi Labels to be Suppressed from Fuel Economy Guide

Hi Dave;

Earlier this year we certified and labeling the normal wheel base (NWB) 2016 Audi A8 with both the 3.0L V6 and 4.0 V8 gasoline concepts. Audi of America has decided to only make the long wheel base Audi A8L available for ordering. Please suppress these two 2016 labels from the fuel economy guide, VGA indexes #010 and #024. If there is some action I must take in Verify please let me know.

Best regards,

**Ex. 7**

**Ex. 7**

Volkswagen Group of America, Inc.

**Ex. 7**

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Wed 7/1/2015 7:33:06 PM  
**Subject:** 2016 FE Guide - data in Verify as of July 1, 2015  
VW Group 2016 FE Guide-all rel dates-no-sales-7-1-2015.xlsx

Richard,

Per your request.

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Thur 6/25/2015 2:32:41 PM  
**Subject:** FW: New 5-cycle calculator  
5-Cycle Calculator 2015\_05\_12\_(New\_D5C\_Coef).xlsm

Richard,

Here is Bob Peavyhouse's revised FE Label calculator. I haven't used it yet. It looks like it will calculate both the 2008 and the 2017 Derived 5-cycle values, depending on the radio buttons which you select.

It hasn't been thoroughly double checked by us EPA folks----so please be on the lookout for potential errors. Let me know whether or not you find any problems with it.

Bob is out of the office for 2 weeks, returning on Mon 7/6/2015.

Dave

**From:** French, Roberts  
**Sent:** Thursday, June 25, 2015 9:51 AM  
**To:** Good, David  
**Subject:** FW: New 5-cycle calculator

**Roberts W. French, Jr.**

U.S. Environmental Protection Agency

National Vehicle and Fuel Emissions Laboratory

2000 Traverwood Drive

Ann Arbor, Michigan 48105

(734) 214-4380

**From:** Peavyhouse, Robert  
**Sent:** Monday, May 18, 2015 2:22 PM  
**To:** French, Roberts  
**Subject:** New 5-cycle calculator

When you get a chance, try this calculator out with some known values to make sure it calculates as expected.

Let me know . . .

Robert Peavyhouse  
Compliance Division  
U.S. EPA - OTAQ  
Phone: (734) 214-4814

**To:** [REDACTED] **Ex. 7**  
**From:** Good, David  
**Sent:** Wed 6/24/2015 1:16:42 PM  
**Subject:** RE: 2016 FE Guide - Errors in Verify as of June 23, 2015 [Thanks, Richard] NNTO

**From:** [REDACTED] **Ex. 7**  
**Sent:** Wednesday, June 24, 2015 6:30 AM  
**To:** Good, David  
**Cc:** Snyder, Jim; [REDACTED] **Ex. 7**  
**Subject:** RE: 2016 FE Guide - Errors in Verify as of June 23, 2015

Hi Dave;

I corrected index #040 GTI 2.0L. I had also noticed that the maximum ethanol usage rate of 15% was not listed on this audit for the Bentley 6.0L Continental models indexes: 028, 029, and 030 which I had made yesterday early morning. Your summary still has the 10% maximum value. I'm sure it will read correctly on the next audit.

Thanks,

**Ex. 7**

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Tuesday, June 23, 2015 6:11 PM  
**To:** [REDACTED] **Ex. 7**  
**Cc:** Snyder, Jim  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of June 23, 2015

**Ex. 7**

Re: 2016 FE Guide - Errors in Verify as of June 23, 2015

Attached are the data in Verify as of June 23, 2015. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 & 2016 FE Label data will be on July 1, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Wed 6/17/2015 1:37:46 PM  
**Subject:** Re: 2016 FE Guide - Data in Verify as of June 16, 2015  
VW Group 2016 FE Guide-all rel dates-no-sales-6-16-2015.xlsx

Richard,

FYI. Attached are the data in Verify as of June 16, 2015---in case you added any new labels recently.

Dave

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 6/11/2015 1:06:38 PM  
**Subject:** RE: 2016 FE Guide - data as of 6/9/2015 10 AM attached  
VW\_Group\_2016 FE Guide-all rel dates-no-sales-6-11-2015.xlsx

Richard,

Here you go. The macro didn't pick up any errors.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Thursday, June 11, 2015 7:38 AM  
**To:** Good, David  
**Subject:** RE: 2016 FE Guide - data as of 6/9/2015 10 AM attached

Thanks Dave;

This all looks good. I labeled about 16 more model types (including two Volkswagen models) after you ran this latest report. I don't think I will be doing anymore today. So, if you could run your fuel economy audit again for the 2016 VWGoA labeling program I can be sure there are no errors to be fixed.

I will be out this afternoon, tomorrow and Monday but will have my job PC and able to work from home if need be.

Thanks,

Richard

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Wednesday, June 10, 2015 1:48 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** 2016 FE Guide - data as of 6/9/2015 10 AM attached

Richard,

Here you go.

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Wed 6/10/2015 5:47:52 PM  
**Subject:** 2016 FE Guide - data as of 6/9/2015 10 AM attached  
VW\_Group\_2016 FEGuide-all rel dates-no-sales-6-9-2015.xlsx

Richard,

Here you go.

**To:** [REDACTED] **Ex. 7** @vw.com  
**Cc:** [REDACTED] **Ex. 7** [@vw.com]; Snyder, Jim[Snyder.Jim@epa.gov]; French, Roberts[french.roberts@epa.gov]  
**From:** Good, David  
**Sent:** Thur 6/4/2015 6:50:34 PM  
**Subject:** Voluntary use the 3-Cycle Label method;  
VW Group 2015 FE Guide-all rel dates-no-sales-5-27-2015.xlsx

[REDACTED] **Ex. 7**

As we discussed last week, EPA fuel economy regulations (and EPA policy) don't allow manufacturers to voluntarily use the 3-cycle method to calculate FE Labels when data from the test group passed the Litmus test. [The provisions of 40 CFR 600.210-12(a) and EPA guidance letter CISD-10-04 allow manufacturers to voluntarily use the vehicle specific 5-cycle method, but are silent with regard to voluntarily using the 3-cycle method.]

VW:

Test Group: FVGAV01.4VPA (Jetta Hybrid), Highway Litmus = +11.55%

FE Tests (tests used for EDV as well): DVWX10023353 (57.5 unadjusted mpg for FTP), DVWX91001606 (65.5 unadjusted mpg for HWY), DVWX10023355 (43.5 unadjusted mpg for US06)

The 2015 Jetta Hybrid Label calculated using the 3-cycle method is 42/48/45 mpg.

The 2015 Jetta Hybrid Label calculated using the 2-cycle method would have been 42/46/44 mpg (according to my calculations).

As we discussed on 5/22/2015, using the 3-cycle method is OK for the 2015MY Jetta Hybrid. However for 2016MY, if the fuel economy data and the litmus test data are carried over to 2016MY, please don't use the 3-cycle method for the FE Label calculations for the 2016MY Jetta Hybrid.

Similarly, in the future, please don't voluntarily use the 3-cycle method for other vehicles with passing Litmus test results.

Thanks

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Wed 6/3/2015 6:32:18 PM  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of June 3, 2015  
VW Group 2016 FE Guide-all rel dates-no-sales-6-3-2015.xlsx

Richard,

Re: 2016 FE Guide - Errors in Verify as of June 3, 2015

Attached are the data in Verify as of June 3, 2015. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 & 2016 FE Label data will be on June 9, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** [REDACTED] **Ex. 7**  
**Cc:** Anderson, Tom[Anderson.Tom@epa.gov]  
**From:** Good, David  
**Sent:** Fri 5/22/2015 6:04:13 PM  
**Subject:** FW: USEAP/Volkswagen Meeting - Tier 3 Implementation  
EPA Meeting Report Tier 3 Implementation July 16 2014 Draft.pdf

[Ex. 7]

Tom Anderson & I are putting together a Tier 3 Q& A document that EPA will share with the Industry.

Do you have a final version of the minutes to VW's Tier 3 meetings with EPA staff last summer---- that I can glean some Q&A's for the EPA Tier 3 guidance document?

I won't use and of the Q&A's that are specific to VW's certification & carryover plans, etc.

Thanks

Dave

**From:** [REDACTED] **Ex. 7**  
**Sent:** Monday, August 18, 2014 3:17 PM  
**To:** Olechiw, Michael; Passavant, Glenn; Fernandez, Antonio; Wysor, Tad; Stout, Alan; Good, David; Snyder, Jim; Wright, DavidA; Laroo, Chris  
**Subject:** RE: USEAP/Volkswagen Meeting - Tier 3 Implementation  
**Importance:** High

To all:

Please see the e-mail from July 18, 2014 below. It distributed a draft meeting report from the July 16, 2014 USEPA/VW Group meeting on Tier 3 implementation.

Your reaction to our summary of the meeting would be appreciated. There were also a few open points that EPA was going to check. For the most part, the open points are contained in Agenda item 8 covering LEV III Certification and Carryover to Tier 3. Please see the bold-print items in the "Follow-Up Action" column of the report. I have attached copies of the report and the revised version of the carryover slides, distributed with my earlier e-mail, for your convenience.

We would appreciate your input so that we are able to close the open points.

Best regards,

**Ex. 7**

Volkswagen Group of America, Inc.

**Ex. 7**

**From:** [redacted] Ex. 7

**Sent:** Friday, July 18, 2014 11:26 AM

**To:** Michael Olechiw ([Olechiw.Michael@epamail.epa.gov](mailto:Olechiw.Michael@epamail.epa.gov)); Glenn Passavant/AA/USEPA/US ([Passavant.Glenn@epamail.epa.gov](mailto:Passavant.Glenn@epamail.epa.gov)); Antonio Fernandez/AA/USEPA/US ([Fernandez.Antonio@epamail.epa.gov](mailto:Fernandez.Antonio@epamail.epa.gov)); [wysor.tad@epa.gov](mailto:wysor.tad@epa.gov); Alan Stout/AA/USEPA/US ([Stout.Alan@epamail.epa.gov](mailto:Stout.Alan@epamail.epa.gov)); David Good ([Good.David@epamail.epa.gov](mailto:Good.David@epamail.epa.gov)); [Snyder.jim@Epa.gov](mailto:Snyder.jim@Epa.gov); Wright, DavidA ([Wright.DavidA@epa.gov](mailto:Wright.DavidA@epa.gov)); 'Laroo.chris@Epa.gov'

**Cc:** [redacted]

Ex. 7

## Ex. 7

**Subject:** USEAP/Volkswagen Meeting - Tier 3 Implementation

To all:

On July 16, 2014, representatives from the Volkswagen Group met with EPA staff to discuss topics related to the implementation of the Tier 3 requirements. Copies of the presentation materials were distributed by e-mail on July 15, 2014. Subsequent to the meeting, Volkswagen prepared a meeting report. It presents a brief discussion and conclusions drawn for each of the agenda topics. It also points out areas where further action is required and/or EPA confirmation is requested (specified in bold typeface).

We would particularly like to direct EPA's attention to Agenda Item 8, LEV III Certification and Carryover to Tier 3. A revised version of the slides for this item is attached. The revisions are shown in red. Slide 7 from the original deck addressed the topic of Tier 3 Evap. This is not included in the new deck since we agreed on the information presented and do not believe that further discussion is required. Slides 6 and 7 of the new deck address the topic of applicable test procedures and carryover implications. The new Slide 7 presents Volkswagen's understanding of the EPA explanation from the meeting regarding the test procedures that apply to various vehicle concepts, assuming that the concepts are "carried over" through their lifespan. The test procedures referred to as Part 1066 Stage 1 and Stage 2, are as described on the new Slide 6. Slides 8 and 9 are included for reference.

Volkswagen appreciates the opportunity to meet with you, and looks forward to your comments on the report.

Best regards,

**Ex. 7**

Volkswagen Group of America, Inc.

**Ex. 7**

**To:** Peavyhouse, Robert[Peavyhouse.Robert@epa.gov]; French, Roberts[french.roberts@epa.gov]  
**Cc:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Fri 5/8/2015 3:05:56 PM  
**Subject:** FW: New 5-Cycle Calculator  
5-Cycle Calculator 2013\_02\_13\_(RegionalSettingsFix)-from Bob-2-14-2013.xls

Bob,

I talked to Richard this morning and he is wondering if you have a new comprehensive 5-cycle calculator (2-cycle, 3-cycle 5-cycle litmus calcs, etc) using the revised derived 5-cycle equation---- similar to the attached calculator.

Richard has the spreadsheet that Rob sent to the Alliance, but needs to figure out if his vehicles still pass the litmus test with the new derived 5-cycle equation.

Richard----please add anything that I may have missed.

Thanks

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Friday, May 08, 2015 8:58 AM  
**To:** Good, David  
**Subject:** New 5-Cycle Calculator

Hi Dave;

As we discussed on the phone I would like to obtain a copy of the new EPA 5-cycle calculator that we use to calculate configuration data for our labeling program. I understand that you might have a draft copy of the EPA calculator before the manufacturer guidance letter is issued.

It would speed up our evaluation of the affects upon our model labels. In particular the Litmus test and that may well have a greater affect upon our testing burden.

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Tue 4/21/2015 10:26:55 PM  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of April 21, 2015  
VW Group 2016 FE Guide-all rel dates-no-sales-4-21-2015.xlsx

Richard,

Re: 2016 FE Guide - Errors in Verify as of April 21, 2015

Our macro didn't catch any errors. Sorry---I got busy and couldn't send it earlier.

Attached are the data in Verify as of April 21, 2015. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 & 2016 FE Label data will be on May 1, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Fri 3/27/2015 1:35:23 PM  
**Subject:** CAFE/GHG - Attestations that production values are accurate signed by a V.P. - examples attached  
Example CAFE Report -10-5-09.pdf  
Subaru attestation.009.pdf

Richard,

Here are some examples from other mftrs. Some mftrs just have a V.P. sign the cover letter.

Dave

# Example - CAFE Report

[REDACTED]

December 8, 1997

Mr. Dave Good  
Vehicle Programs and Compliance Division  
Office of Mobile Sources  
U.S. Environmental Protection Agency  
2565 Plymouth Road  
Ann Arbor, Michigan 48105

RE: 40 CFR PART 600;  
[REDACTED] 1997 MODEL YEAR CAFE REPORT

Dear Mr. Good:

[REDACTED] herewith submits the required Model Year Report for 1997 model year, in accordance with 40 CFR part 600, Subpart F Section 600.512-86.

Should any further questions arise with regard to this particular matter, please contact our representative at the following address.

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
Very truly yours,

[REDACTED]  
Vice President  
Operations Coordination

1997 [REDACTED] MODEL YEAR REPORT

1. MANUFACTURER'S AVERAGE
2. MODEL TYPE FUEL ECONOMY
3. ENGINE CODE EQUIVALENCY & DATA SUBSTITUTION
4. DOMESTIC CONTENT PERCENTAGES

1. MANUFACTURER'S AVERAGE

1997 [REDACTED] AVERAGE FUEL ECONOMY VALUES

(a) Import Passenger Automobiles

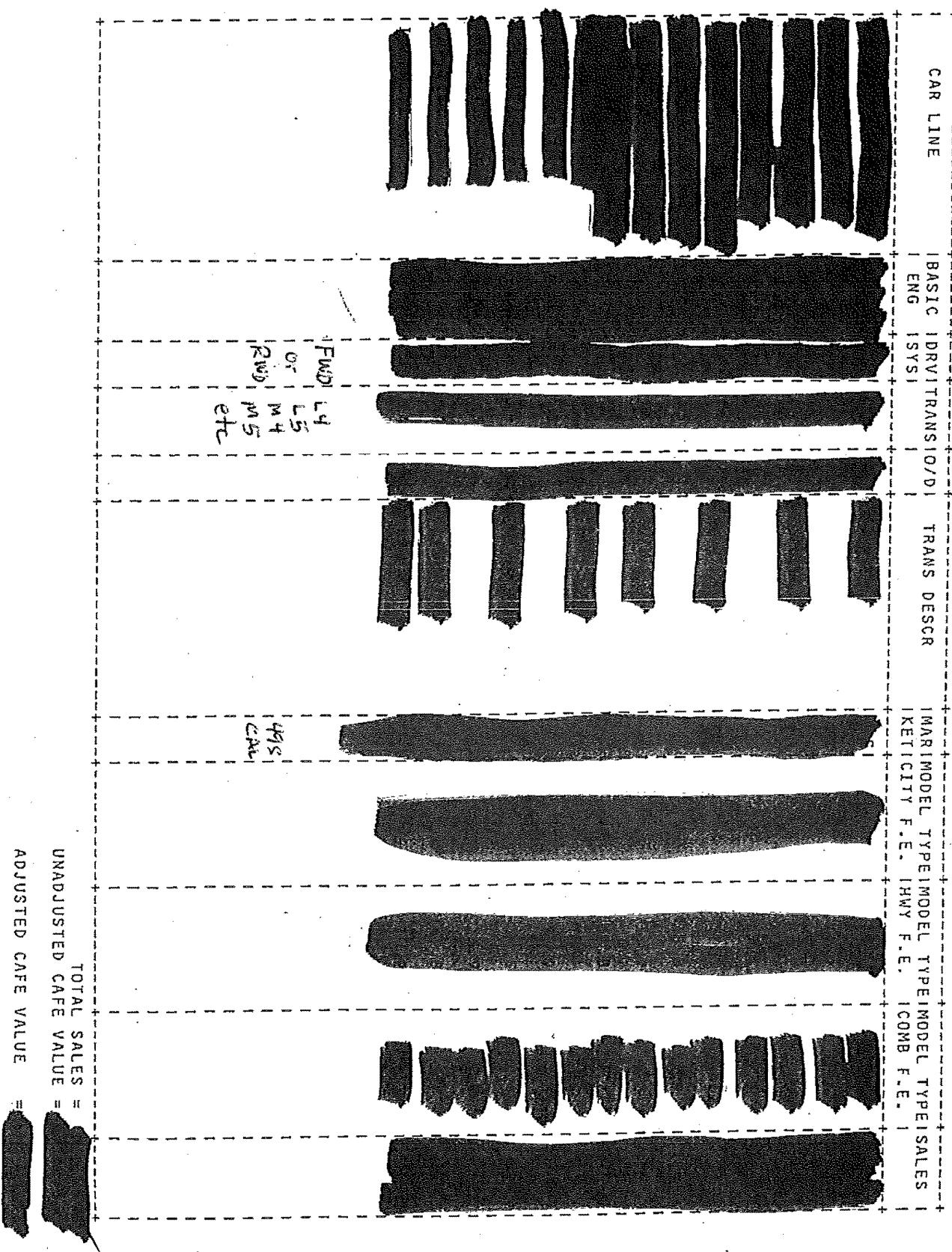
Unadjusted Fuel Economy Average = [REDACTED] MPG  
Adjusted Fuel Economy Average = [REDACTED] MPG

(b) Other Light Truck

Combined Fuel Economy Average = [REDACTED] MPG

## 1997 PASSENGER VEHICLE

IMPORT



### 3. ENGINE CODE EQUIVALENCY & DATA SUBSTITUTION

#### A. Engine Code Equivalency

Although different engine codes are used for a model with an air conditioner and a model without it, we use the same engines for both models. Since it does not have any influence on emission and fuel economy data vehicles, we believe following engine codes are equivalent.

INDEX	ENGINE CODE EQUIVALENCY
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### B. Data Substitution

#### 4. DOMESTIC CONTENT PERCENTAGES

CONFIDENTIAL

~~Domestic Content Percentages for the 1997 Model Year Vehicles~~

A stacked bar chart illustrating the composition of domestic content across three categories: Carline, Production Location, and Domestic Content. The Y-axis represents the percentage of domestic content, ranging from 0% at the bottom to 100% at the top. The X-axis lists the categories. Each bar is composed of four distinct segments, representing different components or sub-categories of domestic content.

Category	Segment 1	Segment 2	Segment 3	Segment 4
Carline	~10%	~20%	~30%	~40%
Production Location	~15%	~25%	~35%	~35%
Domestic Content	~10%	~20%	~30%	~40%

**1994 MODEL YEAR REPORT ATTESTATION**

The following information is submitted pursuant to 40 CFR §600.512-86:

With respect to the data contained herein, Ford Motor Company, a Delaware corporation with its principal place of business at The American Road, Dearborn, Michigan and a manufacturer of new motor vehicles (hereinafter the "Company"), hereby attests that appropriate Company employees have been directed to formulate, implement, and follow reasonable, prudent procedures to ascertain and provide production data that are accurate and authentic in all material respects, and that a review of these procedures indicated that these procedures were being followed by the Company's employees involved in the reporting process.

FORD MOTOR COMPANY

By: H. O. Petrauskas  
H. O. Petrauskas  
Vice President  
Environmental & Safety Engineering

Dated this 22<sup>nd</sup> day  
of May 1995

Subscribed and sworn before me:

Lucille H. Lusserden

County of Wayne                    LUCILLE H. LUSSERDEN  
State of Michigan                   Notary Public, Wayne County, Michigan  
Commission Expires:               My Commission Expires September 18, 1995.



## FUJI HEAVY INDUSTRIES LTD.

1-1 SUBARU-CHO OTA-SHI GUNMA-KEN 373-8555, JAPAN

### Appendix E

Pursuant to 40 CFR 600.512-01(c)(7), I, [REDACTED] on behalf of Fuji Heavy Industries Ltd. do attest to the authenticity and accuracy of the production data in this 2008 Model Year Report for Subaru vehicles.

This attestation constitutes a representation by Fuji Heavy Industries Ltd. that it has established reasonable, prudent procedures to ascertain and provide production data that are accurate and authentic in all material respects and that these procedures have been followed by employees of Fuji Heavy Industries Ltd. In the reporting process.

Dec. 26, 2008

[REDACTED]  
[REDACTED]  
[REDACTED]  
Corporate Vice President  
Subaru Manufacturing Div.  
Fuji Heavy industries Ltd.

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Wed 3/25/2015 6:18:40 PM  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of March 24, 2015  
VW\_Group\_2016 FE Guide-all rel dates-no-sales-3-24-2015.xlsx

Richard,

Re: 2016 FE Guide - Errors in Verify as of March 24, 2015

Attached are the data in Verify as of March 24, 2015. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 & 2016 FE Label data will be on April 1, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** ross.gatzke@porsche.us[ross.gatzke@porsche.us]; Peavyhouse, Robert[Peavyhouse.Robert@epa.gov]; French, Roberts[french.roberts@epa.gov]  
**From:** Good, David  
**Sent:** Fri 3/20/2015 3:15:09 PM  
**Subject:** 2014 VW Group CAFE/GHG - Porsche Panamera PHEV calcs  
PHEV Calculator v13 (2014) - Panamera and 918-from Ross-7-7-2014.xls  
PHEV Calculator v17 with sample data-from Rob-8-13-2014.xls

Richard,

For PHEVs, mfrs just need to provide Bob Peavyhouse with the unrounded mpg and CREE values for each PHEV subconfiguration contained in their 2014 CAFE/GHG. Please send Bob the composite (CD/CS) unrounded city, hwy and combined mpg and CREE values. Bob will then enter these values directly into Verify for each applicable PHEV subconfiguration (and Rob or I will double check your PHEV CAFE/GHG calculations by hand).

Please use the attached V17 version of Rob's PHEV calculator. I'll also attach a copy of the 2014 Panamera data which we used for the 2014 FE Labels (V13).

Ross, as Richard & I were discussing on the phone today, it's probably better if you would send these values to Bob (and cc Richard) since Porsche staff understand the PHEV calculations quite well, etc.

It's my understanding that for 2014 model year Porsche will be aggregated with VW Group for both CAFE & GHG calculations.

Bob, please let us know if you need anything else.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Mon 3/16/2015 8:42:09 PM  
**Subject:** Re: 2016 FE Guide - Errors in Verify as of March 16, 2015  
VW\_Group\_2016 FE Guide-all rel dates-no-sales-3-16-2015.xlsx

Richard,

Re: 2016 FE Guide - Errors in Verify as of March 16, 2015

Attached are the data in Verify as of March 16, 2015. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 & 2016 FE Label data will be on March 24, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Wed 3/11/2015 10:39:58 PM  
**Subject:** 2016 FE Guide - Errors  
VW\_Group\_2016 FE Guide-all rel dates-no-sales-3-11-2015.xlsx

Richard,

Here's the data as of 6AM today.

Dave

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 3/5/2015 9:07:53 PM  
**Subject:** RE: Data in Verify attached as of Mar 5, 2015  
VW\_Group\_2016\_FE\_Guide\_Data-all\_rel\_dates-no-sales.xlsx

Richard,

Here you go.

Dave

**From:** Thomas, Richard (EEO) [mailto:[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)]  
**Sent:** Thursday, March 05, 2015 9:47 AM  
**To:** Good, David  
**Subject:** RE: Data in Verify attached as of Mar 2, 2015

Okay that's fine, thank you.

**From:** Good, David [mailto:[good.david@epa.gov](mailto:good.david@epa.gov)]  
**Sent:** Thursday, March 05, 2015 9:38 AM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: Data in Verify attached as of Mar 2, 2015

Richard,

I'll run the query today----but I have a 10AM meeting.

Dave

**From:** Thomas, Richard (EEO) [<mailto:Richard.Thomas@vw.com>]  
**Sent:** Thursday, March 05, 2015 6:50 AM  
**To:** Good, David  
**Subject:** RE: Data in Verify attached as of Mar 2, 2015

Hi Dave;

Did you run this 2016 audit new as of yesterday, because these are the original values and not the accepted correction I did for both indexes #003 and #004 on March 2<sup>nd</sup>? I was reviewing the Monroney labels for our marketing folk yesterday and today, and see that Index #004 is not on the website but index #003 does appear. Index #003 was the one you were going ask DOE (Janet) to pull off the site, but it was the same day you sent them to her. I couldn't find an email, so I guess I should have followed up with and email to you, I think we only discussed it on the phone on or about February 27<sup>th</sup>.

Could you please ask DOE to remove index #003 from the site. If you could run another 2016 query again to include these two indexes, I might see the corrected values. Both have a late March release date now of March 30<sup>th</sup>. The 2016 Audi A6 quattro TDI and A7 quattro TDI models have still not been released from the ports.

If you have any questions, I am here today.

Thanks,

Richard

Phone: 248 754 4213

Fax: 248 754 4207

<mailto:Richard.Thomas@VW.com>

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Wednesday, March 04, 2015 2:43 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** Data in Verify attached as of Mar 2, 2015

Richard,

Here's the data as of Monday. I think you made your changes last week. [I was mistaken, I didn't send Index #4 (Audi A7 Quattro Diesel) to DOE for posting yet.]

Let me know if I need to do another (more-up-to-date) query.

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Wed 3/4/2015 7:42:34 PM  
**Subject:** Data in Verify attached as of Mar 2, 2015  
VW\_Group\_2016 FE Guide-all rel dates-no-sales-3-2-2015.xlsx

Richard,

Here's the data as of Monday. I think you made your changes last week. [I was mistaken, I didn't send Index #4 (Audi A7 Quattro Diesel) to DOE for posting yet.]

Let me know if I need to do another (more-up-to-date) query.

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Thur 2/26/2015 3:09:47 PM  
**Subject:** Re: 2015-2016 FE Guide - Errors in Verify as of Feb 24, 2015  
VW Group 2016 FE Guide-all rel dates-no-sales-2-24-2015.xlsx  
VW Group 2015 FE Guide -all release dates -no-sales-2-24-2015.xlsx

Richard,

Re: 2015-2016 FE Guide - Errors in Verify as of Feb 24, 2015

Attached are the data in Verify as of February 24, 2015. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 & 2016 FE Label data will be on March, 2015 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Tue 1/20/2015 6:31:22 PM  
**Subject:** 2016 FE Guide data attached  
VW\_Group\_2016 FEGuide-all rel dates-no-sales-1-15-2015.xlsx

Richard,

Here you go. The macro didn't pick up any errors, so you must have calculated the combined CO2 value correctly. It doesn't check the voluntarily increased hwy CO2 value for accuracy.

Dave

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]; Rodgers, William (EEO)[William.Rodgers@vw.com]; Allen, Gregory (EEO)[Gregory.Allen@vw.com]  
**From:** Good, David  
**Sent:** Thur 12/18/2014 9:48:29 PM  
**Subject:** RE: 2015 FE Guide – Errors in Verify as of November 20, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-12-16-2014.xlsx

Richard,

I'm catching up on old emails. I think the displacements should be correct on the web by now. Here's the 2015 data in Verify as of 12/16/2014 if you need it.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, December 03, 2014 11:34 AM  
**To:** Good, David  
**Cc:** Snyder, Jim; Rodgers, William (EEO); Allen, Gregory (EEO)  
**Subject:** RE: 2015 FE Guide – Errors in Verify as of November 20, 2014

Hi Dave;

We think we have it straighten around now. Can you send me your 2015 fuel economy audit again so I can check to see if the models are picking up the correct 1.8L or 2.0L information?

Thanks,

Richard

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Tuesday, December 02, 2014 3:21 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim; Rodgers, William (EEO); Allen, Gregory (EEO)

**Subject:** RE: 2015 FE Guide – Errors in Verify as of November 20, 2014

Richard,

This bug in verify was suppose to be corrected in the most recent Verify Tier 3 deployment (Nov 24, 2014).

You'll probably have to correct the errors one last time, but after that Verify won't shuffle the engine configurations when you make changes to a CSI.

Dave

**From:** Thomas, Richard (EEO) [mailto:[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)]  
**Sent:** Wednesday, November 26, 2014 10:00 AM  
**To:** Good, David  
**Cc:** Snyder, Jim; Rodgers, William (EEO); Allen, Gregory (EEO)  
**Subject:** RE: 2015 FE Guide – Errors in Verify as of November 20, 2014

Hello Dave;

I know you will first see this mail next week, but we noticed another problem with regard to the engine displacements and are currently working on correcting this error.

This is the scenario we corrected earlier this year and now we have the same issue again due to changes made to the CSI when adding models and/or engine codes to the gasoline fueled test group FVGAV02.0APA with two engine displacements (2.0L and 1.8L). Currently, whenever a change is made to add a new engine code the order of the existing Verify CSI engine configurations gets shuffled around, so that carline with the 1.8L engine now become 2.0L in the fuel economy information.

We asked that this issue be corrected in Verify several months ago but to our knowledge it has not been taken care of yet.

The following carlines, applicable test group engine displacements and label indexes are listed here for your convenience and should appear that way on the fuel economy guide website:

Carline	disp	Index #
A3	1.8L	007
A3 Cabriolet	1.8L	006
Golf	1.8L	085 & 103
Golf SportWagen	1.8L	not labeled yet
A3 quattro	2.0L	004
A3 Cabriolet quattro	2.0L	005
GTI	2.0L	001 & 008

Please contact me with questions. I will look forward to your next audit and will verify what you will send to the website contractor.

Best regards,

Richard

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Thursday, November 20, 2014 4:13 PM  
**To:** Thomas, Richard (EEO)  
**Cc:** Snyder, Jim  
**Subject:** re: 2015 FE Guide – Errors in Verify as of November 20, 2014

Richard,

re: 2015 FE Guide – Errors in Verify as of November 20, 2014

Attached are the data in Verify as of November 20, 2014. Labels with pea green fill in the first few columns have errors but which need to be corrected in Verify before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred.

The next normal posting of 2015 FE Label data will be on December 2, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]; French, Roberts[french.roberts@epa.gov]  
**From:** Good, David  
**Sent:** Thur 10/9/2014 5:45:27 PM  
**Subject:** RE: 2015 Volkswagen e-Golf Label  
VW Group 2015 FEGuide-all rel dates-no-sales-10-8-2014.xlsx

Richard,

There was only one error and one warning message. See attached. Does the e-Gold really have 27 batteries---or is that the number of cells?

Please send us a copy of the FE label (window sticker) when you get a chance.

Thanks

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, October 08, 2014 9:26 AM  
**To:** Good, David  
**Subject:** 2015 Volkswagen e-Golf Label

Hi Dave;

I have attached the EPA calculator for the e-Golf. The two configuration kW-hr/100 mile values were sales weighted arithmetically averaged together before inserting them into this calculator as you told me previously over the phone. I am still a little uncertain about unrounded values so if you run the audit again this morning I may be able to figure out which values are in error if it discovers some.

It looks like now the testing at EPA for this e-Golf certification car has been waived as of late yesterday evening.

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Tue 10/7/2014 9:17:15 PM  
**Subject:** RE: 2015 FE Guide - Data in Verify as of Oct 2, 2014 - including the eGolf  
VW\_Group\_2015 FEGuide-all rel dates-no-sales-10-2-2014.xlsx

Richard,

Our macro generates 2 rows for all PHEVs & EVs. You can see the data for all other EVs & PHEVs in the download the datafile (PHEV or EV tab) at [www.fueleconomy.gov](http://www.fueleconomy.gov).

Wherever you entered fuel consumption value of 29.0 in Verify, please revise it to zero. (Electric vehicles don't consume any gasoline.) I think you entered the kw-hr/100 mile data correctly---in the mpg fields with different units.

I ran the query around 1PM today. I can run it again whenever you need it.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Tuesday, October 07, 2014 2:53 PM  
**To:** Good, David  
**Subject:** RE: 2015 FE Guide - Data in Verify as of Oct 2, 2014 - including the eGolf

Hi Dave;

Thanks for the information. I have a couple more questions. Why are there two rows for the same e-Golf 109 index? One row seems to have MPGe numbers while the other has kW-hr/100 mile values. Where do I input the fuel consumption number in kW-hr per 100 miles in Verify. I originally put it into the field that I normally put the fuel consumption in MPG, but the message I see from your report said that electric cars should be zero. Where you going to run your audit again for this index?

If you can call tomorrow, I would appreciate it.

Thanks,

Richard

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Tuesday, October 07, 2014 11:25 AM  
**To:** Thomas, Richard (EEO)  
**Cc:** Giles, Michael (EEO)  
**Subject:** RE: 2015 FE Guide - Data in Verify as of Oct 2, 2014 - including the eGolf

Richard,

I'm sorry----the fuel cost error statements in the dataset are incorrect.

The EPA EV calculator calculates annual fuel cost correctly. I didn't have the calculator results when I sent you the dataset errors. The macro's calculations of \$500 annual fuel cost and \$8500 5-year savings are wrong.

The spreadsheet calculations are based on the equation in 600.311-12(e). In that equation, it doesn't make sense to round miles per kW-hr---so that's why the calculator used the unrounded value.

So the values you input into Verify were correct (\$550 annual fuel cost and \$8250 for the 5-year savings).

Dave

**From:** Thomas, Richard (EEO) [<mailto:Richard.Thomas@vw.com>]  
**Sent:** Monday, October 06, 2014 8:27 AM  
**To:** Good, David  
**Cc:** Giles, Michael (EEO)  
**Subject:** RE: 2015 FE Guide - Data in Verify as of Oct 2, 2014 - including the eGolf

Hi Dave;

I assume you are not in today but back on Tuesday. This is what I found, I used the same EPA EV calculator that you sent again and found that the calculator does not use a rounded combined kW-hr/100 mi number but rather an unrounded value of 29.2205 which then multiplied by the 15,000 miles and times the 0.12 cents gives a value of 525.9690 which then rounds to the \$550 value I entered into verify. If I use a rounded value of 29 kW-hr/100 mi I get your \$500 annual fuel cost value. It appears that Verify uses a rounded value. I also noticed that the unrounded fuel cost number in the calculator takes the unrounded adjusted combine value in miles per kW-hr and not the 29 rounded kW-hr/100 mi value. So maybe the calculator needs to be undated to use the rounded combined kW-hr/100 mile value in the annual fuel cost calculation. What do you think?

Thanks,

Richard

**From:** Good, David [<mailto:good.david@epa.gov>]  
**Sent:** Friday, October 03, 2014 3:50 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** 2015 FE Guide - Data in Verify as of Oct 2, 2014 - including the eGolf

Richard,

Our macro picked up a few errors for the eGolf.

I couldn't double check your values since I don't have your spreadsheet calculator for the eGolf (and I didn't bother to look in Verify for the test data). I'll attach a generic EV spreadsheet for your convenience (although I think I've sent it to you before).

I get \$500 for the annual fuel cost, as follows:

Ann Fuel Cost = 15,000 miles x 29 kW-hr/100 miles x \$0.12 per kW-hr = \$522, which rounds to \$500.

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** oliver.schmidt@vw.com[oliver.schmidt@vw.com]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Mon 8/18/2014 7:53:44 PM  
**Subject:** re: 2015 FE Guide - Data in EPA's database as of Aug 15, 2014 for your review; on Aug 28, 2014 I will send error free Verify data to DOE for the 2015 Printed Guide & the web  
VW Group 2015 FEGuide-all rel dates-no-sales-8-15-2014.xlsx

Richard,

re: 2015 FE Guide - Data EPA's database as of Aug 15, 2014 for your review; on Aug 28, 2014 I will send error free Verify data to DOE for the 2015 Printed Guide & the web

Attached are the data in Verify as of August 15, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov) or included in the 2015 Printed Guide.

**Printed Guide** – For the 2015 Printed Guide, I will send all error-free data in Verify to DOE on August 28, 2014, regardless of release date. The data will not be released outside of EPA & DOE offices until the week of November 17, 2014, when 2015 Printed Guides are scheduled to be mailed to dealerships, libraries and credit unions. Please email me if there are data in Verify which you do not want included in the 2015 Printed Guide.

**Web Update** - The next normal posting of 2015 FE Label data for [www.fueleconomy.gov](http://www.fueleconomy.gov) will be on August 28, 2013 to coincide with the schedule for the 2015 Printed Guide. On that day, I'll send all the error-free data in Verify (which is releasable) to DOE to update [www.fueleconomy.gov](http://www.fueleconomy.gov), business-as-usual.

Reminders:

- Please double check the attached data in Verify for errors, missing labels, etc.
- Please send me a short email when you think the 2015 FE Label data is “good to go.”
- August 27, 2014 is the last day to make changes for the 2015 Printed Guide.
- If you enter new label data into Verify before Aug 28, 2014, please double check it carefully for accuracy.

•□□□□□□□□□ Don't forget to send me the placeholders for the 2015 Printed Guide in an Excel spreadsheet as soon as possible.

Please make any needed corrections to Verify when you get a chance.

Thanks

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Mon 8/18/2014 4:55:51 PM  
**Subject:** latest EPA EV and PHEV calculators attached  
PHEV Calculator v17 with sample data-from Rob-8-13-2014.xlsm  
2015 generic EV Label calculations-1-18-13.xlsm

Richard,

Last week, I promised to send you the latest PHEV calculator. Rob updated it to calculate total range, etc. Also, the Verify FE Label values are now calculated---they are pretty much in the upper right part of the spreadsheet.

The EV calculator hasn't changed, except I might not have sent you the 2015 model year calculator.

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Mon 8/18/2014 4:31:40 PM  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of August 15, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-8-15-2014.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of August 15, 2014

FYI----there were no errors.

Attached are the data in Verify as of August 8, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on Aug 22, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later). All errors must be corrected by August 26<sup>th</sup> (at the very latest) in order for the vehicle to be listed in the 2015 Printed Guide, ref EPA Guidance letter CD-14-15.

Please make any needed corrections to Verify as soon as possible.

Thanks

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Mon 7/21/2014 11:11:07 PM  
**Subject:** 2015 FE Guide attached  
VW\_Group\_2015 FEGuide-all rel dates-no-sales-7-21-2014.xlsx

Richard,

Here is the FE Guide as of approx 10AM this morning---just as the macro ran---I didn't have time to clean up the data and check for errors.

It looks OK to me.

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Wed 6/18/2014 9:32:51 PM  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of June 17, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-6-17-2014.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of June 17, 2014

Attached are the data in Verify as of June 17, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on June 23, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Thur 6/12/2014 2:55:37 PM  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of June 11, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-6-11-2014.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of June 11, 2014

Attached are the data in Verify as of June 11, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). The errors are also highlighted in yellow fill in the column where the error occurred. [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on June 17, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Good, David  
**Sent:** Thur 4/24/2014 7:04:21 PM  
**Subject:** re: 2015 FE Guide - Errors in EPA's data base as of April 23, 2014  
VW Group 2015 FEGuide-all rel dates-no-sales-4-23-2014-PM.xlsx

Richard,

re: 2015 FE Guide - Errors in EPA's data base as of April 23, 2014

Attached are the data in Verify as of April 23, 2014. Labels with pea green fill in the first few columns have errors which need to be corrected before I can have the data posted on [www.fueleconomy.gov](http://www.fueleconomy.gov). [Note that the method our macro uses for calculating voluntarily increased CO2 values is outlined in section 10.1 of CD-13-11---(if the macro flagged any errors in voluntarily increased CO2 values).]

The next normal posting of 2015 FE Label data will be on May 1, 2014 (on a monthly schedule where I run the query on the 1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup> and 23rd of the month) and send the data to DOE for posting on that day (or a day later).

If you need an important 2014 or 2015 FE Label posted on the web before the next posting, please send me an email message and I'll be glad to have it posted earlier.

Please make any needed corrections to Verify when you get a chance.

Thanks

Dave

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Mon 3/31/2014 11:09:26 PM  
**Subject:** RE: 2015 Fuel Economy audit  
VGA2015 FEGuide-all rel dates-no-sales-3-31-2014.xlsx

Richard,

Here you go---I didn't see any errors.

I'll run the query tomorrow around 10AM for the data to be sent to DOE---so if you need to make changes, please make them before 10AM or email me.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Monday, March 31, 2014 1:44 PM  
**To:** Good, David  
**Subject:** 2015 Fuel Economy audit

Hi Dave;

Just a reminder, we spoke last Thursday and you said you might be able to send me the audit of the Volkswagen Group 2015 fuel economy labels before you sent the information off to Janet on the first of April.

Thanks,

Richard

*Richard E. Thomas*

VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Good, David  
**Sent:** Tue 3/4/2014 6:00:42 PM  
**Subject:** 2015 FE Guide errors  
VGA2015 FEGuide-all rel dates-no-sales-3-3-2014.xlsx

Richard,

The Diesel Touareg had an error. See attached.

Dave

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, February 26, 2014 1:30 PM  
**To:** Good, David  
**Subject:** RE: please call

Oh thanks Dave. It all looks good.

Richard

**From:** Good, David [mailto:good.david@epa.gov]  
**Sent:** Wednesday, February 26, 2014 12:44 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** RE: please call

Richard,

Here you go,

[I had macro problems yesterday.]

Dave

**From:** Thomas, Richard (EEO) [<mailto:Richard.Thomas@vw.com>]  
**Sent:** Wednesday, February 26, 2014 10:12 AM  
**To:** Good, David  
**Subject:** please call  
**Importance:** High

Hi Dave;

I had to make changes to 2015 VGA index 007 and 006 and the annual fuel cost and 5 year savings values. If you ran that report yesterday could you see that the label audit is run again today to pick up these changes.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Tue 6/23/2015 5:58:31 PM  
**Subject:** Automatic reply: Test Data for V148RXX-0058

Back in the office on July 1st.

Tobias Glas

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Mon 3/9/2015 8:57:06 PM  
**Subject:** Automatic reply: Notification of EPA in-use test class V138/V139

Business trip to Germany, expect a delayed response.

Tobias Glas

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 11/5/2014 8:24:28 PM  
**Subject:** Cancellation of class V120/V121

Hi, Tobias.

We were not successful in procuring any of the vehicles in this class so we are cancelling it.

Best regards,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Thur 10/16/2014 3:19:18 PM  
**Subject:** Notification of EPA In-use class V102/V104  
Notif- V102 - VW.pdf

Hi, Tobias.

I recently sent a letter to your company as notification of an upcoming in-use class. Attached, please find a copy of that letter for your convenience. Let me know if you have any questions.

Thank you,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY  
2565 PLYMOUTH ROAD  
ANN ARBOR, MICHIGAN 48105-2498

October 15, 2014

OFFICE OF  
AIR AND RADIATION

Mr. Dennis Reineke  
Volkswagen of America  
3800 Hamlin Road  
Auburn Hills, Michigan 48326

Dear Mr. Reineke,

The Environmental Protection Agency will test a 2012 model-year Volkswagen test-group in our surveillance test-program. The group shown in Enclosure 1 will be tested at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan. Test results which exceed applicable standards may lead to confirmatory testing.

A sample of three or more vehicles will be procured. Maintenance will consist of an under-hood inspection and review of on-board computer codes. The federal test procedure, highway cycle, and US06 test will follow a single LA-4 preconditioning cycle. If this test-group contains models which are two-wheel drive with selectable four-wheel drive or selectable all-wheel drive, the vehicles may be tested in either of these modes.

Vehicles in the class may be subjected to an evaporative test and/or Cold CO testing. Additionally, fault conditions may be introduced on one or more of the vehicles to test the response of the On-Board Diagnostics (OBD) system.

We invite your representatives to be present as observers during the test program. If you have any questions concerning this investigation please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Lynn Sohacki".

Lynn Sohacki  
Compliance Division

Enclosure

ENCLOSURE 1

Lab

NVFEL  
Ann Arbor, Michigan

Test Group

**Ex. 4, 7**

Estimated Start Date

Week-ending 12/26/2014

Recall/Testing Representative

Lynn Sohacki

Telephone Number

(734) 214-4851

E-mail address

Sohacki.lynn@epa.gov

Class Numbers

**Ex. 4, 7**

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 9/16/2014 4:35:57 PM  
**Subject:** RE: Test results for T132RXX-0062

Hi, Tobias.

Yes, the cold cell is up and running. I try to have at least one Cold CO test done per class.

We are not planning on testing any more vehicles in this class.

There are no VWs, Audis, Porsches or Bentleys included in the next stage of coast down testing.

Thanks for your help with this class.

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Tuesday, September 16, 2014 11:30 AM  
**To:** Sohacki, Lynn; Snyder, Jim  
**Subject:** RE: Test results for T132RXX-0062

Hi Lynn,

Thank you for the results. I see you have the Cold chamber up and running. ☺

Please let me know if you plan on testing any more cars for that test group or if Surveillance testing is finished.

Last time I was at EPA I heard that there is another round of coastdown testing going on. Can you give me a heads up if there will be any VW, Audi, Porsche or Bentleys be part of the program?

Thank you very much

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Tuesday, September 16, 2014 10:37 AM  
**To:** Glas, Tobias  
**Subject:** Test results for T132RXX-0062

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki

Environmental Engineer

Compliance Division

EPA

734-214-4851

**To:** Foss, Kyle[Kyle.Foss@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Fri 9/5/2014 2:36:05 PM  
**Subject:** RE: Parameters needed for T132RXX-0062 (2012 Audi/A5) -

**Ex. 7**

Thank you, Kyle.

I'll pass this information along.

Lynn

**From:** Foss, Kyle [mailto:[Kyle.Foss@vw.com](mailto:Kyle.Foss@vw.com)]  
**Sent:** Friday, September 05, 2014 10:12 AM  
**To:** Sohacki, Lynn  
**Cc:** Glas, Tobias  
**Subject:** RE: Parameters needed for T132RXX-0062 (2012 Audi/A5) -

**Ex. 7**

Hi Lynn,

I made I mistake on the coefficients on the first table I sent you. I apologize, I think I must have made an error converting to U.S. units.

Attached is a corrected sheet. I hope this does not disrupt testing.

Thank you,

**Kyle Foss**

Engineering Analyst

Test Center California (TCC)

**Volkswagen Group of America, Inc.**

201 Del Norte Blvd.

Oxnard, CA 93030

Phone: (805) 436-8617

Mobile: (805) 205-0560

Fax: (805) 485-3602

[kyle.foss@vw.com](mailto:kyle.foss@vw.com)

<http://www.vw.com>

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]

**Sent:** Wednesday, August 27, 2014 12:58 PM

**To:** Foss, Kyle

**Cc:** Glas, Tobias

**Subject:** RE: Parameters needed for

**Ex. 7**

Thank you, Kyle.

Regards,

Lynn Sohacki

**From:** Foss, Kyle [mailto:[Kyle.Foss@vw.com](mailto:Kyle.Foss@vw.com)]

**Sent:** Wednesday, August 27, 2014 3:49 PM

**To:** Sohacki, Lynn

**Cc:** Glas, Tobias

**Subject:** RE: Parameters needed for

**Ex. 7**

Hi Lynn,

Tobias is on vacation until September 3<sup>rd</sup>. Attached is the completed parameter sheet, as well as photos of the under hood connections and traction control button.

Please let me know if anything needs to be clarified or if you need any more information.

Thank you,

**Kyle Foss**

Engineering Analyst

Test Center California (TCC)

**Volkswagen Group of America, Inc.**

201 Del Norte Blvd.

Oxnard, CA 93030

Phone: (805) 436-8617

Mobile: (805) 205-0560

Fax: (805) 485-3602

[kyle.foss@vw.com](mailto:kyle.foss@vw.com)

<http://www.vw.com>

**From:** Glas, Tobias

**Sent:** Tuesday, August 26, 2014 12:30 PM

**To:** Foss, Kyle

**Subject:** Fw: Parameters needed for [redacted]

**Ex. 7**

Please send the data to Lynn.

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]

**Sent:** Tuesday, August 26, 2014 11:10 AM

**To:** Glas, Tobias

**Subject:** Parameters needed for

**Ex. 7**

Hi, Tobias.

The following vehicle will be brought in next week:

**Ex. 7**

Vehicle Pick up on 9/2/14

(Tuesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Thur 8/14/2014 2:50:07 PM  
**Subject:** test data for T132-0125

**Ex. 7**

Hi, Tobias

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki

Environmental Engineer

Compliance Division

EPA

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 7/16/2014 8:22:38 PM  
**Subject:** Notificaiton of Selection of EPA In-Use Class T132

**Ex. 7**

Hi, Tobias.

I recently sent a letter to your company as notification of an upcoming in-use class. Attached, please find a final copy of that letter for your convenience. Let me know if you have any questions.

Thank you,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY  
2565 PLYMOUTH ROAD  
ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF  
AIR AND RADIATION

July 16, 2014

Mr. Dennis Reineke  
Volkswagen of America  
3800 Hamlin Road  
Auburn Hills, Michigan 48326

Dear Mr. Reineke,

The Environmental Protection Agency will test a 2012 model-year Audi test-group in our surveillance test-program. The group shown in Enclosure 1 will be tested at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan. Test results which exceed applicable standards may lead to confirmatory testing.

A sample of three or more vehicles will be procured. Maintenance will consist of an under-hood inspection and review of on-board computer codes. The federal test procedure, highway cycle, and US06 test will follow a single LA-4 preconditioning cycle. If this test-group contains models which are two-wheel drive with selectable four-wheel drive or selectable all-wheel drive, the vehicles may be tested in either of those modes.

Vehicles in this class may be subjected to an evaporative test and/or Cold CO testing. Additionally, fault conditions may be introduced on one or more of the vehicles to test the response of the On-Board Diagnostics (OBD) system. If you are aware of OBD enabling criteria which would limit our ability to evaluate these systems, please inform me. Copies of the OBD enabling criteria which were approved during certification should be provided if there are such limitations.

We invite your representatives to be present as observers during the test program. If you have any questions concerning this investigation please contact me.

Sincerely,

A handwritten signature in black ink that reads "Lynn Sohacki".

Lynn Sohacki  
Compliance and Innovative Strategies Division

Enclosure

ENCLOSURE 1

Lab

NVFEL  
Ann Arbor, Michigan

**Ex. 7**

Test Group

Estimated Start Date

Week-ending July 25, 2014

Recall/Testing Representative

Lynn Sohacki

Telephone Number

(734) 214-4851

Email Address

Sohacki.lynn@epa.gov

**Ex. 7**

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 7/15/2014 8:54:34 PM  
**Subject:** Notification of a new in-use class T132  
NOTIF-T-132-Audi.doc  
parameters form cold CO and US06 CO.xlsx

Hi, Tobias.

This is a notification of an upcoming in-use class. Normally, I send an email like this out when a notification letter is sent to a manufacturer to announce an in-use class. However, due to a support staff mix-up, the letter wasn't sent last month when I drafted it. It is being edited and will be sent tomorrow.

Unfortunately, the procurement process has proceeded independently of the letter and we have one of the vehicles scheduled to be procured next week.

I apologize for the late notice of both the in-use class and the notification of the procurement of this vehicle. I am attaching to this email a draft version of the notification letter. A final version will be mailed to Dennis and emailed to you. Because it has been so long, would you please confirm the mailing address?

The vehicle being brought in next week is:

**Ex. 7**

07/23/14 (Wednesday) 0730 Vehicle

Pick up\_

Please fill out the attached parameter sheet and return it to me.

Our contractor, Jacobs, will be contacting you to schedule the maintenance. We have some flexibility in scheduling the maintenance of the vehicle. I hope that we can find something to accommodate your schedule. If not, please call me and I'll see what I can do.

Again, I apologize for the confusion. Please call me if you have any questions.

Thank you,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

July 15, 2014

Mr. Dennis Reineke  
Volkswagen of America  
3800 Hamlin Rd.,  
Auburn Hills, Michigan 48326

Dear Mr. Reineke,

The Environmental Protection Agency will test a 2012 model-year Audi test-group in our surveillance test-program. The group shown in Enclosure 1 will be tested at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan. Test results which exceed applicable standards may lead to confirmatory testing.

A sample of three or more vehicles will be procured. Maintenance will consist of an under-hood inspection and review of on-board computer codes. The federal test procedure, highway cycle, and US06 test will follow a single LA-4 preconditioning cycle. If this test-group contains models which are two wheel drive with selectable four wheel drive or selectable all wheel drive, the vehicles may be tested in either of these modes.

Vehicles in the class may be subjected to an evaporative test and/or Cold CO testing. Additionally, fault conditions may be introduced on one or more of the vehicles to test the response of the On-Board Diagnostics (OBD) system. If you are aware of OBD enabling criteria which would limit our ability to evaluate these systems, please inform me. Copies of the OBD enabling criteria which were approved during certification should be provided if there are such limitations.

We invite your representatives to be present as observers during the test program. If you have any questions concerning this investigation please contact me.

Sincerely,

Lynn Sohacki  
Compliance Division

Enclosure

ENCLOSURE 1

Lab

NVFEL  
Ann Arbor, Michigan

**Ex. 7**

Test Group

Week-ending July 25, 2014

Recall/Testing Representative

Lynn Sohacki

Telephone Number

(734) 214-4851

E-mail address

Sohacki.lynn@epa.gov

Class Numbers

**Ex. 7**

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**Cc:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Foss, Kyle  
**Sent:** Fri 9/5/2014 2:11:42 PM  
**Subject:** RE: Parameters needed for T132RXX-0062 (2012 Audi/A5) – VIN# WAULFAFR9CA036689  
A5 CA036689 parameters form cold CO and US06 CO (2).xlsx

Hi Lynn,

I made I mistake on the coefficients on the first table I sent you. I apologize, I think I must have made an error converting to U.S. units.

Attached is a corrected sheet. I hope this does not disrupt testing.

Thank you,

**Kyle Foss**

Engineering Analyst

Test Center California (TCC)

**Volkswagen Group of America, Inc.**

201 Del Norte Blvd.

Oxnard, CA 93030

Phone: (805) 436-8617

Mobile: (805) 205-0560

Fax: (805) 485-3602

kyle.foss@vw.com

<http://www.vw.com>

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Wednesday, August 27, 2014 12:58 PM  
**To:** Foss, Kyle  
**Cc:** Glas, Tobias  
**Subject:** RE: Parameters needed for T132RXX-0062 (2012 Audi/A5) – VIN# WAULFAFR9CA036689

Thank you, Kyle.

Regards,

Lynn Sohacki

**From:** Foss, Kyle [<mailto:Kyle.Foss@vw.com>]  
**Sent:** Wednesday, August 27, 2014 3:49 PM  
**To:** Sohacki, Lynn  
**Cc:** Glas, Tobias  
**Subject:** RE: Parameters needed for T132RXX-0062 (2012 Audi/A5) – VIN# WAULFAFR9CA036689

Hi Lynn,

Tobias is on vacation until September 3<sup>rd</sup>. Attached is the completed parameter sheet, as well as photos of the under hood connections and traction control button.

Please let me know if anything needs to be clarified or if you need any more information.

Thank you,

**Kyle Foss**

Engineering Analyst

Test Center California (TCC)

**Volkswagen Group of America, Inc.**

201 Del Norte Blvd.

Oxnard, CA 93030

Phone: (805) 436-8617

Mobile: (805) 205-0560

Fax: (805) 485-3602

[kyle.foss@vw.com](mailto:kyle.foss@vw.com)

<http://www.vw.com>

**From:** Glas, Tobias

**Sent:** Tuesday, August 26, 2014 12:30 PM

**To:** Foss, Kyle

**Subject:** Fw: Parameters needed for T132RXX-0062 (2012 Audi/A5) – VIN# WAULFAFR9CA036689

Please send the data to Lynn.

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]

**Sent:** Tuesday, August 26, 2014 11:10 AM

**To:** Glas, Tobias

**Subject:** Parameters needed for T132RXX-0062 (2012 Audi/A5) – VIN# WAULFAFR9CA036689

Hi, Tobias.

The following vehicle will be brought in next week:

**T132RXX-0062 (2012 Audi/A5) – VIN# WAULFAFR9CA036689, 0800 Vehicle Pick up on 9/2/14  
(Tuesday)**

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**Cc:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Foss, Kyle  
**Sent:** Wed 8/27/2014 7:48:45 PM  
**Subject:** RE: Parameters needed for [redacted] Ex. 7

**Ex. 7** [redacted]  
parameters form cold CO and US06 CO (2).xlsx  
images.docx

Hi Lynn,

Tobias is on vacation until September 3<sup>rd</sup>. Attached is the completed parameter sheet, as well as photos of the under hood connections and traction control button.

Please let me know if anything needs to be clarified or if you need any more information.

Thank you,

**Kyle Foss**

Engineering Analyst

Test Center California (TCC)

**Volkswagen Group of America, Inc.**

201 Del Norte Blvd.

Oxnard, CA 93030

Phone: (805) 436-8617

Mobile: (805) 205-0560

Fax: (805) 485-3602

[kyle.foss@vw.com](mailto:kyle.foss@vw.com)

<http://www.vw.com>

**From:** Glas, Tobias  
**Sent:** Tuesday, August 26, 2014 12:30 PM  
**To:** Foss, Kyle  
**Subject:** Fw: Parameters needed for [REDACTED]

**Ex. 7**

Please send the data to Lynn.

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, August 26, 2014 11:10 AM  
**To:** Glas, Tobias  
**Subject:** Parameters needed for [REDACTED]

**Ex. 7**

Hi, Tobias.

The following vehicle will be brought in next week:

**Ex. 7**

[REDACTED] Vehicle Pick up on 9/2/14

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

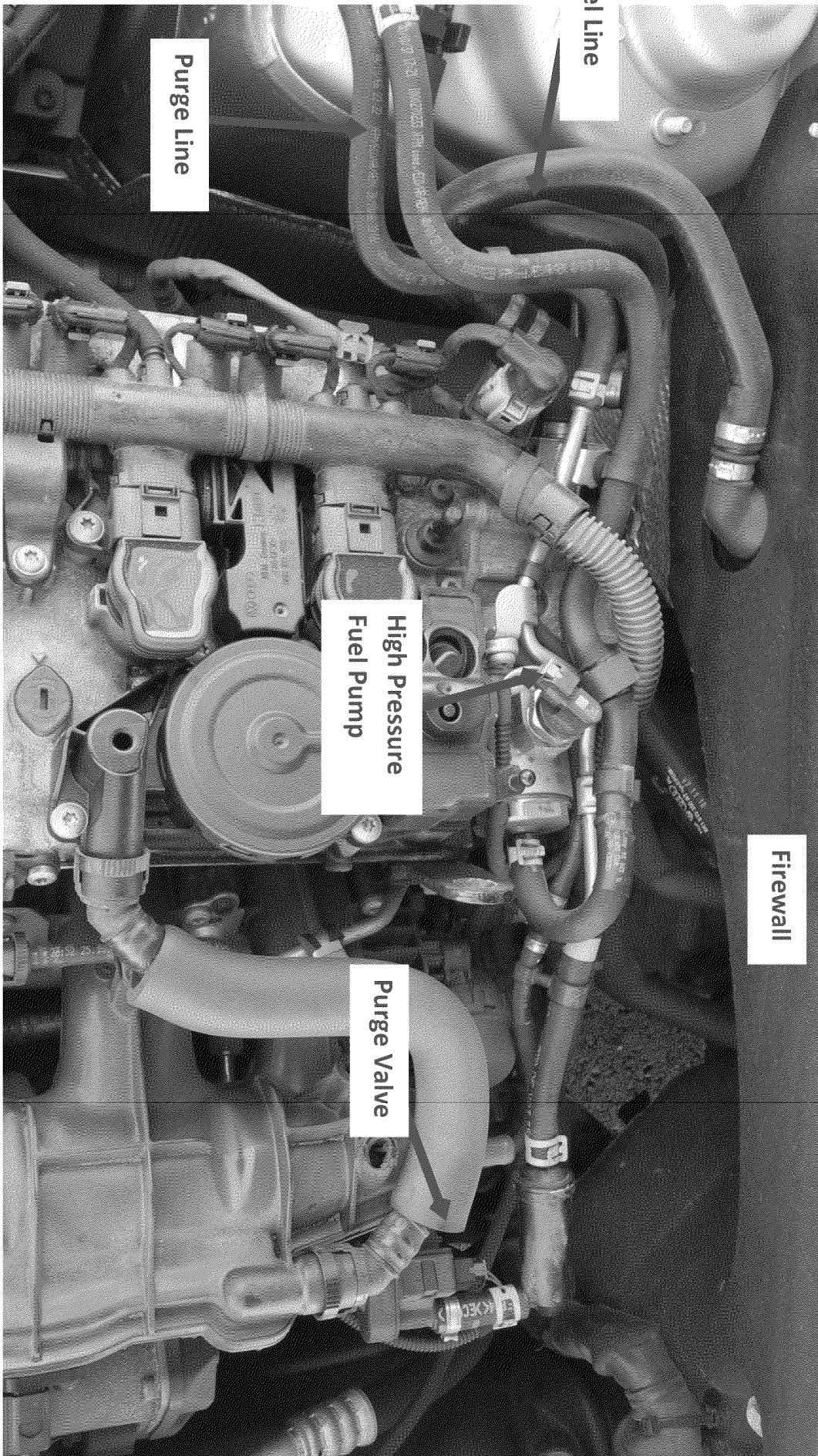
Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851







**To:** richard.thomas@vw.com[richard.thomas@vw.com]  
**From:** Good, David  
**Sent:** Wed 1/15/2014 8:32:15 PM  
**Subject:** 2015 FE Guide as of 1/15/2014 attached  
VGA2015 FEGuide-all rel dates-no-sales-1-15-2014.xlsx

Richard,

Our macro didn't pick up any errors.

Dave

## IUPV Waiver Requests: Objectives, Considerations, and Information Needs (rev 5)

Section 86.1845-04 (b) (3) says that approval for IUPV waivers:

"... will be based on a review of the procurement efforts made by the manufacturer to determine if all reasonable steps have been taken to procure the required test group size."

EPA policy includes the following guidelines for IUPV waiver decisions. EPA's objectives include:

1. Staying within our regulatory authority.
2. Equitably grant and deny waivers among the manufacturers.
3. Maximize IUPV test rates.

These three objectives require flexibility due to the many factors that deserve being considered for deciding on waiver requests.

The purpose of this document is to inform IUPV waiver requestors of the information EPA needs to make a decision

- EPA is becoming aware that there is a significant disparity in incentives. Some manufacturers are offering incentives in excess of \$1,000 while others offer incentives as low as \$150.

While there are legitimate reasons for varying levels of incentives, there appears to be an increasing disparity among manufacturers as to the level of incentives and efforts made to procure some vehicles that are difficult to obtain. Some manufacturers are taking extreme measures to procure vehicles while others appear to make a minimal effort and quickly request a waiver. This is unfair to those manufacturers that are making real efforts to procure vehicles and it limits the number of vehicles tested and the valuable data provided to the IUPV program.

Please provide EPA with the incentives offered.

- High sales test groups are generally expected to be easier to recruit than low sales test groups.

Please provide the sales statistics.

- The emissions levels of vehicles in the test group are considered in whether a waiver is appropriate or not.

Please provide the emissions results with the standards.

Also, when there are difficulties recruiting vehicles, EPA sometimes will grant prior approval for the following:

- Recruiting vehicles outside the mileage window.
- Recruiting from a rental agency such as Hertz, Avis, etc.
- As a last resort, randomly selecting among company-owned vehicles.

Because we are receiving several IUPV waiver requests per week, EPA can provide faster and more equitable decisions if waiver requestors concisely present relevant information.

The list below includes the type of information needed, though the type of waiver request may not justify all of the information listed below, and other requests may be enhanced by including information that is not listed. Also, precise numbers often are not necessary if the precise number is more difficult to attain (i.e. less than 8,000 sales instead of 6,342 sales). Please keep in mind that pertinent information will lead to faster waiver decisions.

- Total U.S. sales, including sales by vehicle model.
- Sales within a 100 mile radius of the emissions laboratory and the radius actually used.
- The remaining number needed to complete the requirement.
- Emissions results and standards for already tested vehicles in the test group.
- Mailing Campaigns:
  - o Number of mailing campaigns.
  - o Number of months, after the end of production, that each mailing campaign began.
  - o Number of letters mailed in each campaign.
  - o Incentives offered in each of the mailings.
- Pertinent statistics on the results of each of the mailing campaign, such as:
  - o Number of owners willing to participate.
  - o Number of owners not willing to participate.

- Reasons for not participating.
  - Number of vehicles rejected.
  - Reason for each rejection.
- Were the loaner vehicles desirable substitutes for target vehicle, for example, but not limited to:
  - Vehicle types: such as were vans made available to van owners?
  - Were the MSRPs at least as high and as well appointed as the target vehicle.
- Procurement area (high altitude, California, 49 State, 50 State)
- Mileage Type (low, high, 75% of full useful life)

Clearly stating the type of waiver being requested also helps. Examples include:

- Waiver from any additional testing.
- Move the vehicle recruiting from high altitude to low altitude.
- Move the vehicle recruiting from Federal to California.
- Mileage waiver, etc.

Providing such information, that is pertinent to your waiver request, will facilitate fast decisions.

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Fri 7/24/2015 2:21:29 PM  
**Subject:** RE: Test data for V149RXX-0097

Hi Lynn,

Thanks, everything looks good to me.

I'll be out of the office next week but there should not be any more cars to inspect anyway.

Looking forward to get more passing results from you.

Have a nice weekend

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Friday, July 24, 2015 9:58 AM  
**To:** Glas, Tobias  
**Subject:** Test data for V149RXX-0097

Hi, Tobias,

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki

Environmental Engineer

Compliance Division

EPA

734-214-4851

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]; Liebner, Bernd[liebner.bernd@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Thur 7/23/2015 12:21:08 PM  
**Subject:** RE: Parameters needed for V149RXX-0308  
V149RXX-0308.xlsx

Hi Lynn, hi Bernd,

Here is the information for today's car.

See you later

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Thursday, July 16, 2015 10:05 AM  
**To:** Glas, Tobias  
**Subject:** Parameters needed for V149RXX-0308

Hi, Tobias.

The following vehicle will be brought in next week:

V149RXX-0308 (2013 VW/Jetta TDI (diesel) – [REDACTED], 07/23/15  
(Thursday) 0930 Vehicle Pick up **Ex. 6**

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851



**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]; Liebner, Bernd[liebner.bernd@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Mon 7/20/2015 7:30:36 PM  
**Subject:** ESP  
ESP Deactivation.pdf

Hi Lynn, hi Bernd,

Today's car was V148RXX-0232, so Bruce had the right paper work with the right vehicle # on it.

Here is the instruction to turn off the ESP.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

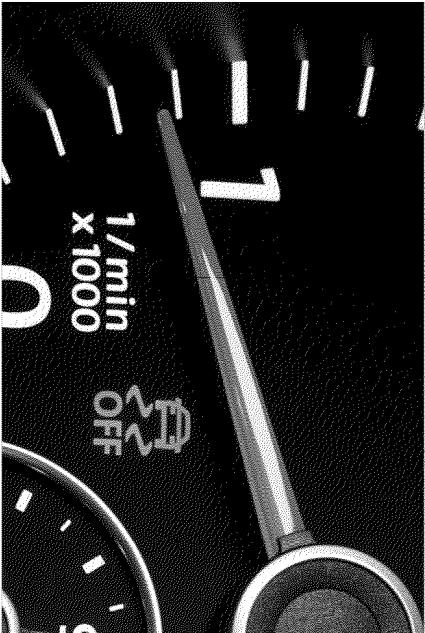
Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

# ESP Deactivation

---

**IMPORTANT:** This procedure must be repeated with every key cycle (engine off).

1. Remove foot from brake. Make sure all doors are closed during the procedure.
2. Key on with transmission in "P" (park) for at least 5 seconds. **Do not start engine!!!**
  - a) In case of manual transmission remove from gear.
3. Turn on hazard lights. Immediately after 5 flashes proceed to next step.
4. Depress and release accelerator pedal 5 times all the way to the floor (past 1<sup>st</sup> stop).
5. Look for solid ESP symbol:  
A close-up photograph of a car's instrument cluster. The central display shows a solid yellow "ESP" symbol, indicating that the Electronic Stability Program is active. The background of the display is dark, and the symbol is bright yellow. Below the display, there is a small digital odometer showing "0". To the left of the display, there is a tachometer scale with markings for "1/min" and "x1000".
6. If ESP symbol is solid, depress brake (and clutch) and start the engine within 5 seconds.
7. Proceed with testing.
8. Hazards must remain on until engine is turned off.
9. **Procedure must be repeated before next start.**

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta; Smith, Brett (EEO)  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** M2 Pre-test Inspection for V149RXX-0308  
**Start Date/Time:** Thur 7/23/2015 4:30:00 PM  
**End Date/Time:** Thur 7/23/2015 5:30:00 PM

M2 Pre-test Inspection for V149RXX-0308

Please contact me if you have questions.

**Ex. 4 - CBI**

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Tue 7/14/2015 3:18:22 PM  
**Subject:** RE: Parameters needed for V148RXX-0232

Hi Lynn,

As along as the car passes I don't mind waiting. ☺

Yes, next Thursday will be fine, I'll be available all week.

Best regards

Tobias

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, July 14, 2015 11:09 AM  
**To:** Glas, Tobias  
**Subject:** RE: Parameters needed for V148RXX-0232

Hi, Tobias.

Sorry for the delay getting the data for V148RXX-0058 to you.

Thank for the parameters. We will let you know if we need the cold CO coefficients.

Will you be available next Thursday for the maintenance?

Best regards,

Lynn

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Tuesday, July 14, 2015 11:01 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Parameters needed for V148RXX-0232

Hi Lynn,

Here are the parameters for the next car.

If you need Cold CO coefficients for one of the cars, please let me know.

I never received a test result for V148RXX-0058, may be I missed it. Can you please send me the result again?

Thank you

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Tuesday, July 14, 2015 10:38 AM  
**To:** Glas, Tobias  
**Subject:** Parameters needed for V148RXX-0232

Hi, Tobias.

The following vehicle will be brought in next week:

**V148RXX-0232 (2013 VW/Jetta TDI (diesel) –** [REDACTED] **Ex. 6** [REDACTED] 07/16/15  
(Thursday) 0700 Vehicle Pick up

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**Cc:** Tobias.Glas@vw.com[Tobias.Glas@vw.com]; brett.smith@vw.com[brett.smith@vw.com]  
**From:** Ross Gatzke  
**Sent:** Mon 7/13/2015 8:50:21 PM  
**Subject:** Re: FW: Check engine light [Ex. 4 - CBI]

Hi, Lynn

Thanks for the update.

[Ex. 4 - CBI]

## Ex. 4 - CBI

Ross Gatzke  
Senior Engineer, Regulatory Affairs  
Porsche Cars North America  
Ross.Gatzke@porsche.us  
Tel: 770-290-3516  
Fax: 678-225-6580

From: "Sohacki, Lynn" <sohacki.lynn@epa.gov>  
To: Ross Gatzke <Ross.Gatzke@porsche.us>  
Date: 07/13/2015 01:45 PM  
Subject: FW: [Ex. 4 - CBI]

---

Hi.

We think that we found the source of the issue.

[Ex. 4 - CBI]

[Ex. 4 - CBI]

Thanks,

Lynn

**From:** Sohacki, Lynn  
**Sent:** Monday, July 13, 2015 12:42 PM  
**To:** 'Ross Gatzke'  
**Subject:** Check engine light [Ex. 4 - CBI]

Hi, Ross.

[Ex. 4 - CBI]

[Ex. 4 - CBI]

[REDACTED] **Ex. 4 - CBI**

Thanks,

Lynn

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]; Maury, Mark[maury.mark@epa.gov]; Liebner, Bernd[liebner.bernd@epa.gov]  
**Cc:** Ross Gatzke (Ross.Gatzke@porsche.us)[Ross.Gatzke@porsche.us]; Smith, Brett (EEO)[Brett.Smith@vw.com]  
**From:** Glas, Tobias  
**Sent:** Mon 7/13/2015 1:03:55 PM  
**Subject:** Porsche Surveillance  
V149RXX-0097.xlsx

Hi Lynn,

Please see attached the data file for the Golf TDI we will inspect on Wednesday.

We will also take the Porsche Surveillance car out of the dyno mode so it can be returned to the customer and take the Porsche tester and the flanges with us while we are there.

Let me know if you need any more information.

See you on Wednesday.

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias\\_Glas@vw.com](mailto:Tobias_Glas@vw.com)

**From:** Knott, Dave  
**Required Attendees:** Sohacki, Lynn; Liebner, Bernd; Hoban, John;  
tobias.glas@vw.com  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** M2 Pre-Test Maintenance V149RXX-0097  
**Start Date/Time:** Wed 7/15/2015 12:30:00 PM  
**End Date/Time:** Wed 7/15/2015 2:00:00 PM

**V149RXX-0097 (2013 VW/Golf TDI (Diesel))**

SORRY for the confusion Wed 7-15 at 8:30 AM

**To:** Hoban, John[Hoban.John@epa.gov]  
**Cc:** Sohacki, Lynn[sohacki.lynn@epa.gov]; Liebner, Bernd[liebner.bernd@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Thur 7/9/2015 1:12:42 PM  
**Subject:** VW Inspection Surveillance Car

Hi John,

Lynn informed me that another car of our Surveillance program is coming in next week on Tuesday.

**V149RXX-0097 (2013 VW/Golf TDI (Diesel))**

-

Please send me an appointment for the inspection, I have a bunch of other appointments next week and want to schedule them around the inspection date.

Thanks for your help.

**Tobias Glas**

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Cell: (248) 494-1537

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E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**Cc:** Liebner, Bernd[liebner.bernd@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Wed 7/1/2015 2:55:09 PM  
**Subject:** RE: Schedule for 2 additional vehicles from class V148/V149

Hi Lynn, hi Bernd,

I am back in the office, if you found more cars for Surveillance testing please let me know and we will come down for an inspection.

Thanks

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

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Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Glas, Tobias  
**Sent:** Tuesday, June 16, 2015 11:35 AM  
**To:** 'Sohacki, Lynn'  
**Cc:** Liebner, Bernd  
**Subject:** RE: Schedule for 2 additional vehicles from class V148/V149

Hi Lynn,

that is perfectly fine. I'll be back in the office on July 1<sup>st</sup> and will be available the rest of July.

Thanks for your help

**Tobias Glas**

In-Use Emission Compliance Specialist

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Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, June 16, 2015 11:12 AM  
**To:** Glas, Tobias  
**Cc:** Liebner, Bernd  
**Subject:** Schedule for 2 additional vehicles from class V148/V149

Hi, Tobias.

**Ex. 4 - CBI** uggested bringing in the two additional vehicles during the week ending 7/24/15. Will that work for you?

Lynn Sohacki

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**Cc:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Liebner, Bernd  
**Sent:** Mon 6/15/2015 6:20:59 PM  
**Subject:** RE: 2.0 TDI

Tobias – we get back to you on that

BML

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Monday, June 15, 2015 1:04 PM  
**To:** Sohacki, Lynn; Liebner, Bernd  
**Subject:** 2.0 TDI

Hi Lynn, hi Bernd

**Ex. 4 - CBI**

**Ex. 4 - CBI**

**Ex. 4 - CBI**

Thanks for your help

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: Tobias.Glas@vw.com

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]; Liebner, Bernd[liebner.bernd@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Wed 6/10/2015 8:06:34 PM  
**Subject:** Surveillance TDI

Hi Lynn, hi Bernd

I got the invitation for the second inspection on car V148RXX-0090 because it failed

**Ex. 4 - CBI**

**Ex. 4 - CBI**

Can you send me the results please? Were all three tests performed?

Thanks for your help.

**Tobias Glas**

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Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** Special Inspection for V148RXX-0090  
**Start Date/Time:** Mon 6/15/2015 12:30:00 PM  
**End Date/Time:** Mon 6/15/2015 1:30:00 PM

Special Inspection for V148RXX-0090

Please contact me if you have questions.

**Ex. 4 - CBI**

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Thur 6/4/2015 7:58:28 PM  
**Subject:** Re: V148RXX-0058

Hi Lynn,

I am very sorry about how this is handled by VW. Please proceed with the EPA standard shift pattern.

Best regards

Tobias Glas

Sent from my iPhone

On Jun 4, 2015, at 12:38 PM, Sohacki, Lynn <[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)> wrote:

HI, Tobias.

We do not have a shift schedule that matches that shift pattern. We will either need a shift schedule from VW or we will need to use the EPA standard shift schedule that does not match the shift pattern you have indicated below.

Thanks,

Lynn

**From:** Glas, Tobias [<mailto:Tobias.Glas@vw.com>]  
**Sent:** Wednesday, June 03, 2015 12:59 PM  
**To:** Sohacki, Lynn  
**Subject:** RE: V148RXX-0058

I'll be out of the office the rest of the week but will be able to read emails.

So send me an email if there are any questions and I will get back to you.

Best regards

Tobias

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Wednesday, June 03, 2015 12:56 PM  
**To:** Glas, Tobias  
**Subject:** RE: V148RXX-0058

Thanks, Tobias.

Lynn

**From:** Glas, Tobias [<mailto:Tobias.Glas@vw.com>]  
**Sent:** Wednesday, June 03, 2015 12:55 PM  
**To:** Sohacki, Lynn  
**Subject:** RE: V148RXX-0058

Hi Lynn,

I am sorry for the delay, I was hoping to get a confirmation from Germany.

So please use the same shift points as for the FTP. That is what we have in the Common sections.

#### **FTP / HWY Shift Points: (Manual Transmission)**

<b>Shift ID</b>	<b>1-2</b>	<b>2-3</b>	<b>3-4</b>	<b>4-5</b>	<b>5-6</b>	<b>CEFIS No.</b>	<b>CFIS No.</b>	<b>Remarks</b>
M6-1	15	25	40	47	52	590 0035	590 0036	HWY FTP

Let me know if you need any more details.

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

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United States of America

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Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Thursday, May 28, 2015 2:04 PM

**To:** Glas, Tobias  
**Subject:** RE: V148RXX-0058

Thanks, Tobias.

Lynn

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Thursday, May 28, 2015 1:55 PM  
**To:** Sohacki, Lynn; Maury, Mark  
**Subject:** V148RXX-0058

Hi Lynn,

And here are the test data for the Jetta Wagen stick.

I am waiting for Germany to send me the US06 shifting points, my guess is I'll have them by tomorrow.

**FTP / HWY Shift Points: (Manual Transmission)**

<b>Shift ID</b>	<b>1-2</b>	<b>2-3</b>	<b>3-4</b>	<b>4-5</b>	<b>5-6</b>	<b>CEFIS No.</b>	<b>CFIS No.</b>	<b>Remarks</b>
M6-1	15	25	40	47	52	590 0035	590 0036	HWY FTP

Best regards

**Tobias Glas**

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E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**Cc:** Liebner, Bernd[liebner.bernd@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Tue 6/2/2015 12:03:08 PM  
**Subject:** RE: Parameters needed for V148RXX-0090  
V148RXX-0090.xlsx

Hi, Lynn,

Here are the parameters for the car we inspected yesterday.

Defueling is just like on the last car. T piece in the fuel line according to page 7 in the presentation I sent you and then let the engine run at idle.

Let me know if you need more information.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

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Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Wednesday, May 27, 2015 1:07 PM  
**To:** Glas, Tobias  
**Subject:** Parameters needed for V148RXX-0090

Hi, Tobias.

The following vehicle will be brought in next week:

**V148RXX-0090 (2013 VW/Jetta (diesel))** – **Ex. 6** 0700 Vehicle  
Pick up on 6/1/15 (Monday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851



**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**Cc:** Liebner, Bernd[liebner.bernd@epa.gov]; Hoban, John[Hoban.John@epa.gov]; Maury, Mark[maury.mark@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Thur 5/28/2015 5:38:41 PM  
**Subject:** RE: TDI defueling

Hi Lynn,

I already sent an email to Mark. Please only look on page 7 which shows the connection that should be used for defueling. Put in the T piece and let the car idle until it is almost empty.

Let me know if you need any more information.

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]

**Sent:** Thursday, May 28, 2015 1:27 PM  
**To:** Glas, Tobias  
**Cc:** Liebner, Bernd; Hoban, John; Maury, Mark  
**Subject:** FW: TDI defueling

Hi, Tobias.

Could you please provide some clarification on energizing the pump in the defueling procedure for this vehicle?

Thanks.

Lynn

**From:** Maury, Mark  
**Sent:** Thursday, May 28, 2015 12:29 PM  
**To:** Liebner, Bernd; Sohacki, Lynn  
**Cc:** Hoban, John  
**Subject:** FW: TDI defueling

Tobias sent procedure, need clarification on energizing pump

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Thursday, May 28, 2015 9:30 AM  
**To:** Maury, Mark  
**Subject:** TDI defueling

Hi Mark,

on page 7 you see a picture that shows which fuel line you can use to defuel the TDI.

I'll send the test data in a bit.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** M2 Pre-Test Inspection for V148RXX-0090  
**Start Date/Time:** Mon 6/1/2015 4:30:00 PM  
**End Date/Time:** Mon 6/1/2015 5:30:00 PM

M2 Pre-Test Inspection for V148RXX-0090

Please contact me if you have questions.

**Ex. 4 - CBI**

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Wed 5/20/2015 5:22:34 PM  
**Subject:** RE: Test data for V138-0032

Hi Lynn,

No worries. I got the paper results for the last Passat (V138RXX-0414)r from Bernd Liebner last week while I was at EPA, but maybe you can send them to me in an email, too?

Including the result for the Cold Co ?

I got a date for the inspection of the first TDI next week, please send me the Parameter Form for the car.

I am not in a hurry so whenever you have time to do it is fine.

Thanks

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Wednesday, May 20, 2015 1:16 PM

**To:** Glas, Tobias

**Subject:** RE: Test data for V138-0032

Hi, Tobias.

I apologize for getting back to you this late.

Yes, the vehicle was released without a retest as we discussed.

Best regards,

Lynn Sohacki

**From:** Glas, Tobias [<mailto:Tobias.Glas@vw.com>]  
**Sent:** Tuesday, May 12, 2015 9:46 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Test data for V138-0032

Hi Lynn,

## **Ex. 4 - CBI**

**Ex. 4 - CBI**

**Ex. 4 - CBI**

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

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E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Monday, May 11, 2015 3:39 PM  
**To:** Glas, Tobias  
**Subject:** Test data for V138-0032

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki  
Environmental Engineer  
Compliance Division  
EPA  
734-214-4851

**From:** Ex. 4 - CBI

**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta

**Location:** Ann Arbor EPA LAB Garage 325 Area

**Importance:** Normal

**Subject:** M2 Pre-Test Inspection for V148RXX-0058

**Start Date/Time:** Wed 5/27/2015 4:30:00 PM

**End Date/Time:** Wed 5/27/2015 5:30:00 PM

M2 Pre-Test Inspection for V148RXX-0058

Please contact me if you have questions.

**Ex. 4 - CBI**

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Tue 5/5/2015 1:08:26 PM  
**Subject:** RE: Parameters needed for V138RXX-0414  
V138 RXX-0414.xlsx

Hi Lynn,

See attached file.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]

**Sent:** Tuesday, May 05, 2015 8:52 AM  
**To:** Glas, Tobias  
**Subject:** FW: Parameters needed for V138RXX-0414

Hi, Tobias.

When you have a chance, would you please send the parameters for this vehicle?

Thanks so much,

Lynn

**From:** Sohacki, Lynn  
**Sent:** Tuesday, April 28, 2015 3:52 PM  
**To:** Glas, Tobias  
**Subject:** Parameters needed for V138RXX-0414

Hi, Tobias.

The following vehicle will be brought in next week:

V138RXX-0414 (2013 VW/Passat) – Ex. 6 0830 Vehicle Pick  
up on 5/5/15 (Tuesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Pidgeon, Bill[pidgeon.bill@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Thur 6/11/2015 2:31:28 PM  
**Subject:** RE: My 09 High Mileage

Hi Jim, hi Bill,

Did you have a chance to look at the draft for the wavers? Please let me know, we want to finish up last year's program.

Thank you

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Glas, Tobias  
**Sent:** Tuesday, May 12, 2015 10:40 AM  
**To:** Pidgeon, Bill; Snyder, Jim  
**Subject:** RE: My 09 High Mileage

Hi Bill, hi Jim

Yes, the car was tested twice, once with 83k and then again with 112k because we didn't have any other %75 car. CDX accepted both data sets so I am thinking about leaving it alone. All the data is there and the comments explain the details.

I attached a draft for the 3 wavers we'd like to ask for. Please take a look at them first and let me know if you need any more information before you forward or discuss them. Overall we didn't find 3 cars out of 110 so I think we did a pretty good job.

I see you tomorrow at the 1.4T SIL meeting.

Best regards

**Tobias Glas**

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Auburn Hills, MI 48326

United States of America

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Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Pidgeon, Bill [<mailto:pidgeon.bill@epa.gov>]  
**Sent:** Monday, May 11, 2015 5:04 PM  
**To:** Glas, Tobias; Snyder, Jim  
**Subject:** RE: My 09 High Mileage

Hi Tobias,

We are thinking that you may have tried to enter the vehicle information again, for a vehicle that already has the same VIN. If so, try "correcting" the information to the latest information. For example change the mileage category from "High" to 75% Useful Life.

Please let me know if that works.

Best wishes,

Bill

\*\*\*\*\*

William M. Pidgeon  
Mechanical Engineer  
U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive  
Ann Arbor, MI 48105-2195  
[pidgeon.bill@epa.gov](mailto:pidgeon.bill@epa.gov)

Phone: 734-214-4416  
Fax: 734-214-4869

**From:** Glas, Tobias [<mailto:Tobias.Glas@vw.com>]  
**Sent:** Wednesday, May 06, 2015 11:16 AM  
**To:** Pidgeon, Bill; Snyder, Jim  
**Subject:** My 09 High Mileage

Hi Bill, hi Jim,

I just submitted a My 09 High Mileage car.

The car was submitted first with 83K miles last year and now I submitted it now with 105K miles.

We didn't find any other car with 105K and I think it is fair game because we have over 20K miles between the test, so better test this than no car.

Of course CDX didn't accept the same VIN but accepted the test results, see attachment.

Please let me know if I should change something or if that is ok because all results should be in the system.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

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Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]; Wehrly, Linc[wehrly.linc@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Ball, Joel[ball.joel@epa.gov]; Dalton, Joel[Dalton.Joel@epa.gov]; Pidgeon, Bill[pidgeon.bill@epa.gov]

**Cc:** [REDACTED]

Ex. 7

## Ex. 7

**From:** [REDACTED] Ex. 7  
**Sent:** Wed 5/13/2015 7:58:55 PM  
**Subject:** RE: VW SIL light shift schedule survey and test drive.  
Customer Shift Survey.pdf

To all:

Thank you for the opportunity to present the Volkswagen Shift Indicator Light (SIL) topic today. I hope that you found having a vehicle available to experience the system first hand was beneficial. I have attached a copy of the final presentation for reference. We understand that EPA now wishes to consider the information presented. Due to a short amount of lead-time and the need to finalize the design and implementation of the SIL system, anything that could be done to expedite a decision would be appreciated. Please let me know if any additional information is required.

Best regards,

[REDACTED] Ex. 7

## Ex. 7

Engineering and Environmental Office  
Volkswagen Group of America, Inc.

Phone: [REDACTED] Ex. 7

Cell: [REDACTED] Ex. 7

Fax: [REDACTED] Ex. 7

E-Mail: [REDACTED] Ex. 7

-----Original Appointment-----

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]

**Sent:** Monday, May 11, 2015 5:13 PM

**To:** Snyder, Jim; Wehrly, Linc; Wright, DavidA; Ball, Joel; Dalton, Joel; Pidgeon, Bill; [REDACTED] Ex. 7

## Ex. 7

**Subject:** VW SIL light shift schedule survey and test drive.

**When:** Wednesday, May 13, 2015 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).

**Where:** AA-Room-Office-C126-ConfRoom/AA-OTAQ-OFFICE

When: Wednesday, May 13, 2015 9:00 AM-10:00 AM (GMT-05:00) Eastern Time (US & Canada).

Where: AA-Room-Office-C126-ConfRoom/AA-OTAQ-OFFICE

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*

VW will present results of SIL survey on their new 1.4L manual along with a vehicle to test drive the SIL.

**To:** Pidgeon, Bill[pidgeon.bill@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Tue 5/12/2015 5:39:34 PM  
**Subject:** RE: My 09 High Mileage  
IUPV Waver request.docx

Hi Bill, hi Jim

Yes, the car was tested twice, once with 83k and then again with 112k because we didn't have any other %75 car. CDX accepted both data sets so I am thinking about leaving it alone. All the data is there and the comments explain the details.

I attached a draft for the 3 wavers we'd like to ask for. Please take a look at them first and let me know if you need any more information before you forward or discuss them. Overall we didn't find 3 cars out of 110 so I think we did a pretty good job.

I see you tomorrow at the 1.4T SIL meeting.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Pidgeon, Bill [mailto:[pidgeon.bill@epa.gov](mailto:pidgeon.bill@epa.gov)]  
**Sent:** Monday, May 11, 2015 5:04 PM  
**To:** Glas, Tobias; Snyder, Jim  
**Subject:** RE: My 09 High Mileage

Hi Tobias,

We are thinking that you may have tried to enter the vehicle information again, for a vehicle that already has the same VIN. If so, try "correcting" the information to the latest information. For example change the mileage category from "High" to 75% Useful Life.

Please let me know if that works.

Best wishes,

Bill

\*\*\*\*\*

William M. Pidgeon  
Mechanical Engineer  
U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive  
Ann Arbor, MI 48105-2195  
[pidgeon.bill@epa.gov](mailto:pidgeon.bill@epa.gov)

Phone: 734-214-4416  
Fax: 734-214-4869

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Wednesday, May 06, 2015 11:16 AM  
**To:** Pidgeon, Bill; Snyder, Jim  
**Subject:** My 09 High Mileage

Hi Bill, hi Jim,

I just submitted a My 09 High Mileage car.

The car was submitted first with 83K miles last year and now I submitted it now with 105K miles.

We didn't find any other car with 105K and I think it is fair game because we have over 20K miles between the test, so better test this than no car.

Of course CDX didn't accept the same VIN but accepted the test results, see attachment.

Please let me know if I should change something or if that is ok because all results should be in the system.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

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E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

## **IUPW Waver request**

Volkswagen Group of America

Waver from additional testing

Test group: 9ADXV02.0366 High Altitude Testing

Emission Standard: BIN 5 / LEV II ULEV

Vehicles in test group: Audi TT

Sales US: under 1200

Sales Procurement state: 4 cars in Colorado

Vehicles tested: 1 HM car tested

Number of mailing campaigns: 2

Letters per campaign: 4

Incentive: 1<sup>st</sup>: \$250 / 2<sup>nd</sup>: \$500

Response: No response from any of the Colorado owners on both mailings.

Comment:

## IUPW Waver request

Volkswagen Group of America

Waver from additional testing

Test group: 9ADXT04.23UD High Altitude Testing

Emission Standard: BIN 5 / LEV II ULEV

Vehicles in test group: Audi Q7 / VW Touareg

Sales US: under 1400

Sales Procurement state: 33 cars in Colorado

Vehicles tested: 1 HM car tested

Number of mailing campaigns: 4

Letters per campaign: 1<sup>st</sup>: 25 / 2<sup>nd</sup>: 9 / 3<sup>rd</sup>: 33 / 4<sup>th</sup>: 32

Incentive: 1<sup>st</sup>: \$250 / 2<sup>nd</sup>: \$250 / 3<sup>rd</sup>: \$500 / 4<sup>th</sup>: \$500

Response: 2 response cards:

- one owner doesn't own the car anymore
- one valid reply canceled last minute without giving a reason

Comment:

## IUPW Waver request

Volkswagen Group of America

Waver from additional testing

Test group: 9VWXV02.5253 High Mileage testing 75% of usefull life

Emission Standard: BIN 5 / LEV II ULEV

Vehicles in test group: VW Jetta Sportwagen, Beetle, Beetle Convertible

Sales US: under 13000

Sales Procurement state: cars in California

Vehicles tested: 2 HM cars and 1 HA car tested

Number of mailing campaigns: 2

Letters per campaign: 1<sup>st</sup>: 25 / 2<sup>nd</sup>: 25

Incentive: 1<sup>st</sup>: \$250 / 2<sup>nd</sup>: \$250

Response: 9 response cards:

- 7 cars didn't have the mileage
- 2 cars qualified, one customer declined, one car was returned

Comment: At the time we wanted to bring the car in the customer had it already returned. We tried to find the new customer with no success. All this happened at the end of the program. We couldn't find any other car with the 75% mileage requirement.

**From:** Snyder, Jim  
**Required Attendees:** Wehrly, Linc; Wright, DavidA; Ball, Joel; Dalton, Joel; Pidgeon, Bill;  Ex. 7  
**Location:** AA-Room-Office-C126-ConfRoom/AA-OTAQ-OFFICE  
**Importance:** Normal  
**Subject:** VW SIL light shift schedule survey and test drive.  
**Start Date/Time:** Wed 5/13/2015 1:00:00 PM  
**End Date/Time:** Wed 5/13/2015 2:00:00 PM

VW will present results of SIL survey on their new 1.4L manual along with a vehicle to test drive the SIL.

**To:** Pidgeon, Bill[pidgeon.bill@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Thur 2/5/2015 9:20:52 PM  
**Subject:** RE: IUPV upload

Hi Bill,

Same file loaded up today without any problems.

It is all good, thanks for your help.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Pidgeon, Bill [mailto:pidgeon.bill@epa.gov]  
**Sent:** Wednesday, February 04, 2015 11:53 AM  
**To:** Glas, Tobias  
**Cc:** Ex. 7 @ARB  
**Subject:** RE: IUPV upload

Hi Tobias,

The snowstorm caused EPA to remain closed on Monday, February 2, 2015, so my plan to extend the "Latest Allowed Submission Date" to 2/14/15 was delayed until Tuesday morning at approximately 11:40 AM, for MY2008 and MY2009 high mileage vehicles.

If you tried to submit the data before I changed the submission dates, it explains the error message. I double-checked the submission dates this morning and the extension is in place. So, you should call the Verify Help Desk if you submitted your data after I changed the submission dates. Please let me know if Help Desk provides a work-around.

If you are entering data other than for MY2008 and MY2009 high mileage vehicles, please email with the model year and the mileage category of the vehicles you need to enter, with a brief explanation of why this is needed.

Best wishes,

Bill

\*\*\*\*\*

William M. Pidgeon  
Mechanical Engineer  
U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive

Ann Arbor, MI 48105-2195  
[pidgeon.bill@epa.gov](mailto:pidgeon.bill@epa.gov)

Phone: 734-214-4416  
Fax: 734-214-4869

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Wednesday, February 04, 2015 10:09 AM  
**To:** [Ex. 7]@ARB  
**Cc:** Pidgeon, Bill  
**Subject:** RE: IUPV upload

Hi **Ex. 7**

I tried to submit a car that had the last test in January and I got this Reject message:

**Transaction Status Identifier :** REJECTED

**Transaction Message Text :** IV-BR24 - IUPV Vehicle Information can only be accepted within the allowed time range of submissions for the Model Year (IV-8) and Mileage Category (IV-20).

According to the attached email from Bill Pidgeon we should be able to submit data until 14<sup>th</sup> of February.

Please let me know what to do.

Thank you

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

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3800 Hamlin Road

Auburn Hills, MI 48326

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Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** [ ] Ex. 7 )@ARB [ ] Ex. 7 )@arb.ca.gov]  
**Sent:** Tuesday, November 04, 2014 1:28 PM  
**To:** Glas, Tobias  
**Subject:** RE: IUPV upload

Hi Tobias,

Thanks for the notification. I changed the submitted vehicle information's EVAP family name from DADXR0140B8F to DADXR0140B8F. Was this the only change you made?

[ ] Ex. 7 ]

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Tuesday, November 04, 2014 5:02 AM  
**To:** [ ] Ex. 7 )@ARB

**Subject:** IUP upload

Hi **[Ex. 7]**,

Sorry to bother you again. Just a minor glitch.

I submitted a car to EPA and it was rejected, because I had the EVAP group wrong. But I received an email that it was uploaded into the ARB system.

When I submitted it again with the right EVAP group it was uploaded in the EPA system but rejected in the ARB system, because it already existed.

Should not be a problem just wanted to give you a heads up.

Thanks, have a nice day.

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

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Cell: (248) 494-1537

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E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Pidgeon, Bill[pidgeon.bill@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Wed 2/4/2015 7:43:30 PM  
**Subject:** RE: IUV upload

Hi Bill,

Thanks for the fast response. I just submitted a My 09 car without any problems. It only happened on the My 13 car before. Does that make sense or am I missing something?

Thanks

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

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E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Pidgeon, Bill [mailto:pidgeon.bill@epa.gov]

**Sent:** Wednesday, February 04, 2015 11:53 AM  
**To:** Glas, Tobias  
**Cc:** [REDACTED] Ex. 7 @ARB  
**Subject:** RE: IUPV upload

Hi Tobias,

The snowstorm caused EPA to remain closed on Monday, February 2, 2015, so my plan to extend the "Latest Allowed Submission Date" to 2/14/15 was delayed until Tuesday morning at approximately 11:40 AM, for MY2008 and MY2009 high mileage vehicles.

If you tried to submit the data before I changed the submission dates, it explains the error message. I double-checked the submission dates this morning and the extension is in place. So, you should call the Verify Help Desk if you submitted your data after I changed the submission dates. Please let me know if Help Desk provides a work-around.

If you are entering data other than for MY2008 and MY2009 high mileage vehicles, please email with the model year and the mileage category of the vehicles you need to enter, with a brief explanation of why this is needed.

Best wishes,

Bill

\*\*\*\*\*

William M. Pidgeon  
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U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive  
Ann Arbor, MI 48105-2195  
[pidgeon.bill@epa.gov](mailto:pidgeon.bill@epa.gov)

Phone: 734-214-4416  
Fax: 734-214-4869

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Wednesday, February 04, 2015 10:09 AM  
**To:** Ex. 7 @ARB  
**Cc:** Pidgeon, Bill  
**Subject:** RE: IUPV upload

Hi [Ex. 7],

I tried to submit a car that had the last test in January and I got this Reject message:

**Transaction Status Identifier :** REJECTED

**Transaction Message Text :** IV-BR24 - IUPV Vehicle Information can only be accepted within the allowed time range of submissions for the Model Year (IV-8) and Mileage Category (IV-20).

According to the attached email from Bill Pidgeon we should be able to submit data until 14<sup>th</sup> of February.

Please let me know what to do.

Thank you

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** [redacted] Ex. 7 [redacted]@arb.ca.gov]  
**Sent:** Tuesday, November 04, 2014 1:28 PM  
**To:** Glas, Tobias  
**Subject:** RE: IUPV upload

Hi Tobias,

Thanks for the notification. I changed the submitted vehicle information's EVAP family name from DADXR0140B8F to DADXR0140B8F. Was this the only change you made?

**Ex. 7**

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Tuesday, November 04, 2014 5:02 AM  
**To:** [redacted] Ex. 7 [redacted]@ARB  
**Subject:** IUPV upload

Hi **Ex. 7**

Sorry to bother you again. Just a minor glitch.

I submitted a car to EPA and it was rejected, because I had the EVAP group wrong. But I received an email that it was uploaded into the ARB system.

When I submitted it again with the right EVAP group it was uploaded in the EPA system but rejected in the ARB system, because it already existed.

Should not be a problem just wanted to give you a heads up.

Thanks, have a nice day.

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Beth Borland[beth.borland@fcagroup.com]; Poirier, Christi[Poirier.Christi@epa.gov]; Daniel Doku (ddoku@maseratiusa.com)[ddoku@maseratiusa.com]; David Robertson (DRobertson@mazdausa.com)[DRobertson@mazdausa.com]; Dennis Pawlak[Dennis.Pawlak@na.mitsubishi-motors.com]; Farrukh Khan (KhanF@NRD.NISSAN-USA.COM)[KhanF@NRD.NISSAN-USA.COM]; Frank Carollo (FCarollo@hatci.com)[FCarollo@hatci.com]; George Hall (ghall12@jaguarlandrover.com)[ghall12@jaguarlandrover.com]; Ian Cawdron (ICawdron@lotuscars.com)[ICawdron@lotuscars.com]; John H. Rugge Jr. (jrug@subaru.com)[jrug@subaru.com]; [REDACTED]@arb.ca.gov; Ken J. Reed[ken.reed@volvocars.com]; Mark M. Poll (mpoll1@ford.com)[mpoll1@ford.com]; Nathan Hinderer[nathan.hinderer@daimler.com]; Peace O. Uwague[Peace.OUwague@bmwnaext.com]; Randall C. Harvey[randall.c.harvey@gm.com]; Ross Gatzke[Ross.Gatzke@porsche.us]; Thomas A. Beierschmitt[tom.beierschmitt@tema.toyota.com]; Tobias Glas[Tobias.Glas@VW.com]; Tommy Chang[Tommy\_Chang@ahm.honda.com]  
**Cc:** Verify Help Desk[verifyhelp@csc.com]; Pidgeon, Bill[pidgeon.bill@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; Good, David[good.david@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Ball, Joel[ball.joel@epa.gov]; Dalton, Joel[Dalton.Joel@epa.gov]; Sohacki, Lynn[sohacki.lynn@epa.gov]; Sabourin, Michael[sabourin.michael@epa.gov]; Anderson, Tom[Anderson.Tom@epa.gov]; Ott, William[ott.william@epa.gov]  
**From:** Pidgeon, Bill  
**Sent:** Thur 1/15/2015 9:57:14 PM  
**Subject:** Entering In-Use IUPV Test Data Into EPA's Verify Database – Work Around For Verify Business Rule LD-IUPV-IV-BR030 & Scheduled Fix Date

Ex. 7

To Manufacturer IUPV Representatives,

Many of you have received an incorrect Verify error message saying "*Mileage Since OBD Leak Check Performed (IV-39.5) is required*" when entering MY2013 IUPV data. For those that have not encountered this, I pasted an email from the Verify Help Desk that discusses a work-around to avoid the problem. The work-around is at the bottom of this email.

On January 30, 2015, Verify is being updated to correct the problem, so the work-around will not be needed starting on Monday, February 2, 2015. However, the "Latest Allowed Submission Date" for the MY2013 low mileage data is also January 30, 2015. So, to streamline the data entry, we extended the "Latest Allowed Submission Date" for the MY2013 low mileage data to Saturday, February 14, 2015, providing the option to avoid the work-around.

Finally, the distribution list is based on our judgement of who to contact at each company for this IUPV update and is currently limited to one contact per company. We prefer to expand the distribution list to two recipients at each company, while being mindful that limiting it to two per company will facilitate maintaining the list for future

communications. Please provide contact information for two company representatives to improve the distribution list.

Thanks,

Bill Pidgeon

**From:** Vincent E Coleman [<mailto:vcoleman2@csc.com>] **On Behalf Of** Verify Help Desk

**Sent:** Thursday, December 18, 2014 12:53 PM

**To:**

**Subject:** Re: Verify In-Use Vehicle Information Submission Error (HLP-5715)

The EPA has authorized a work around for business rule LD-IUPV-IV-BR030. To address this business rule please enter a '1' in the Mileage Since OBD Leak Check Performed (IV-39.5) field and explain in the comments that it was only entered as a business rule work around.

*LD-IUPV-IV-BR030 - If Readiness Status Complete (IV-38) equals 'Y' (Yes) or Incomplete Readiness Status Codes (IV-39) does not include 'EVAP' (Evaporative System), then Mileage Since OBD Leak Check Performed (IV-39.5) is required.*

Thank you for your patience.

Vincent

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

\*\*\*\*\*

William M. Pidgeon  
Mechanical Engineer  
U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive

Ann Arbor, MI 48105-2195  
pidgeon.bill@epa.gov

Phone: 734-214-4416  
Fax: 734-214-4869

## Submit

In a few seconds you should be prompted to save your validated IUPV XML file to your local workstation. If you do not receive the prompt to save the file, you can [Click Here](#) to initiate the save.

Your IUPV has been submitted to the EPA. Should you have any questions, you can contact the EPA at:

**Phone - (888) 890-1995**  
**Email - verifyhelp@csc.com**

<b>Submission Summary</b>	
Date	02/04/2015
Industry	Light-Duty Vehicle & Truck
Compliance Module	IUPV
Transaction ID	_0d34dbe-b666-4330-a4a5-9d29ddb6356f
Total Number of Datasets	4

<b>Vehicle Info Dataset</b>	
Process Code	N
Vehicle ID Number	WAUDFAFM1DA027012
Emission Program	IUVB
Mileage Category	L
Test Group	DADXV02.03UA
Evap Family Name	DADXR0110238

<b>Test Info Dataset</b>	
Process Code	N
Vehicle ID Number	WAUDFAFM1DA027012
Emission Program	IUVB
Mileage Category	L
Test Procedure	21

Verify Test Number	
Manufacturer Test Number	20141216TC207

Test Info Dataset	
Process Code	N
Vehicle ID Number	WAUDFAFM1DA027012
Emission Program	IUVB
Mileage Category	L
Test Procedure	90
Verify Test Number	
Manufacturer Test Number	20141217TC203

Test Info Dataset	
Process Code	N
Vehicle ID Number	WAUDFAFM1DA027012
Emission Program	IUVB
Mileage Category	L
Test Procedure	3
Verify Test Number	
Manufacturer Test Number	20150106TC106

[Return to IUPV Home](#)

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Thur 4/30/2015 3:04:20 PM  
**Subject:** RE: Notification of EPA In-use class V148/V149

Hi Lynn,

Ohh, back to back Surveillance testing! ☺

Not a problem, let us know when you found cars and we will be there.

Talk to you soon.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Thursday, April 30, 2015 10:56 AM  
**To:** Glas, Tobias  
**Subject:** Notification of EPA In-use class V148/V149

Hi, Tobias.

I recently sent a letter to your company as notification of an upcoming in-use class. Attached, please find a copy of that letter for your convenience. Let me know if you have any questions.

Thank you,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

**From:** **Ex. 4 - CBI**

**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov);  
Mazaitis, Vincent; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta

**Location:** Ann Arbor EPA LAB Garage 325 Area

**Importance:** Normal

**Subject:** M2 Pre-Test Inspection for V138RXX-0414

**Start Date/Time:** Tue 5/5/2015 4:30:00 PM

**End Date/Time:** Tue 5/5/2015 5:30:00 PM

M2 Pre-Test Inspection for V138RXX-0414

Please contact me if you have questions.

**Ex. 4 - CBI**

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Wed 4/29/2015 12:37:50 PM  
**Subject:** RE: Update

Hi Lynn,

We will inspect the second car today at 12:30 and have a meeting with Jim at 2 pm. Maybe you can drop by the workshop for a minute?

Do you know if we can do the extra HFET for preconditioning?

Hope to see you later.

Tobias

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, April 28, 2015 4:07 PM  
**To:** Glas, Tobias  
**Subject:** RE: Update

Thank you, Tobias.

Lynn

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Monday, April 27, 2015 3:58 PM  
**To:** Sohacki, Lynn  
**Subject:** Update

Hi Lynn,

The Beetle is a Convertible, so here are the updated weight and coefficients.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Mon 4/27/2015 2:22:35 PM  
**Subject:** RE: Parameters needed for V138RXX-0359 and V138RXX-0032  
Precondition.pdf

Hi Lynn,

We found the letter and we should be able to do a UDDS and a HFET for Preconditioning.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Glas, Tobias  
**Sent:** Monday, April 27, 2015 10:11 AM  
**To:** 'Sohacki, Lynn'

**Subject:** RE: Parameters needed for V138RXX-0359 and V138RXX-0032

Hi Lynn,

As this is a SULEV II car we have the chance to do an extra Preconditioning on the car as we stated in the Cert Preview List. See attachment point 6.2.

I am checking the documents that are referenced there right now.

Talk to you soon

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Monday, April 27, 2015 10:02 AM  
**To:** Glas, Tobias  
**Subject:** RE: Parameters needed for V138RXX-0359 and V138RXX-0032

Thank you, Tobias.

Regards,

Lynn

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Monday, April 27, 2015 9:29 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Parameters needed for V138RXX-0359 and V138RXX-0032

Hi Lynn,

Here are the test data for the two cars. We will be at EPA today at 1 pm to inspect the first car.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, April 21, 2015 9:37 AM  
**To:** Glas, Tobias  
**Subject:** Parameters needed for V138RXX-0359 and V138RXX-0032

Hi, Tobias.

The following vehicle will be brought in next week:

**V138RXX-0359 (2013 VW/Beetle)** –   **Ex. 6**   0830 vehicle pick  
up on 4/27/15 (Monday)

**V138RXX-0032 (2013 VW/Passat)** –   **Ex. 6**   0830 vehicle pick  
up on 4/29/15 (Wednesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851



**United States Environmental Protection Agency  
National Vehicle and Fuels Emission Laboratory  
Ann Arbor, Michigan 48105**

FAX TO DENNIS BEINKE

FAX NUMBER 248 754-4707

PHONE NUMBER 248 754-4715

LOCATION ENVIRONMENTAL OFFICE

FROM BRUCE SAWICKI

FAX NUMBER

734-214-4869

PHONE NUMBER

734 214-4733

**Certification and Compliance Division  
Office of Transportation and Air Quality**

DATE 04/04/04

NUMBER OF PAGES INCLUDING THIS  
COVER SHEET 2

**MESSAGE:**

DENNIS -

REF: YOUR REQUEST FOR ADD'L PRE-COND. ON SOLEV VEH.  
DIDN'T GET ANYWHERE ON NEW VEH. TEST. SEE DAVE GODD'S NOTE.  
THOUGHT IS THAT VEH. SHOULD PERFORM TO SPEC. AS RECEIVED.  
DAVE DID BRING UP LETTER CD-94-13 (7/29/94) THAT ALLOWS ADD'L  
PRE-COND. ON IN-USE TESTING. I GUESS THAT'S "HALF A LOAF"!

BRUCE.

PAGE 1 OF 2 PAGES

**VOLKSWAGEN****RECEIVED  
MAR 05 2002  
VPCD**

February 28, 2002

Mr. Bruce Sdunek  
U.S. Environmental Protection Agency  
Office of Mobile Sources  
Vehicle Programs and Compliance Division  
National Vehicle and Fuel Emission Laboratory  
2000 Traverwood  
Ann Arbor, Michigan 48105

Engineering and  
Environmental Office (EEO)  
Mail Code EEO  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Tel. (248) 754-5000  
Fax (248) 754-4707

**Subject: Request for Additional Preconditioning**

Dear Mr. Sdunek:

As part of the 2003 model year product line, Volkswagen intends to offer a version of the 2.0-liter Volkswagen Jetta certified to the California Partial Zero Emission Vehicle (PZEV) requirements. Therefore, this concept will be required to comply with the California Super-Ultra-Low Emission Vehicle (SULEV) exhaust emission standards and zero-evaporative emission standards.

To ensure emission stabilization prior to emission testing, Volkswagen requests, in accordance with the provisions of 40 CFR 86.132-96(d), that additional preconditioning be allowed when testing the 2.0-liter Volkswagen Jetta PZEV concept. The entire preconditioning process would consist of the prescribed Urban Dynamometer Driving Schedule (UDDS) with the addition of one complete Highway Fuel Economy Test (HWFET) cycle.

The additional preconditioning would be performed whenever an emission test is conducted for new vehicle certification or in-use emission testing.

Your consideration of this matter is greatly appreciated. If there are any questions, please contact me at (248) 754-4704, or Mr. Dennis Reineke of my staff at (248) 754-4715.

Best regards,  
VOLKSWAGEN OF AMERICA, INC.

Handwritten signature of Leonard W. Kata.

Leonard W. Kata, Team Leader  
Emission Regulations and Certification  
Engineering and Environmental Office

Dennis/Len,

Add'l preconditioning has never been allowed ~~pre~~ during EPA preloaded canister tests, therefore we must deny your request for certification tests.

For in-use tests it is approved, ref CD-94-13 dated 7/29/94.

I Good 4/4/02

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Mon 4/27/2015 2:11:11 PM  
**Subject:** RE: Parameters needed for V138RXX-0359 and V138RXX-0032  
CBI\_DVWXV\_COMMON\_LTR\_CPP\_R00.pdf

Hi Lynn,

As this is a SULEV II car we have the chance to do an extra Preconditioning on the car as we stated in the Cert Preview List. See attachment point 6.2.

I am checking the documents that are referenced there right now.

Talk to you soon

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: Tobias.Glas@vw.com

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Monday, April 27, 2015 10:02 AM  
**To:** Glas, Tobias  
**Subject:** RE: Parameters needed for V138RXX-0359 and V138RXX-0032

Thank you, Tobias.

Regards,

Lynn

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Monday, April 27, 2015 9:29 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Parameters needed for V138RXX-0359 and V138RXX-0032

Hi Lynn,

Here are the test data for the two cars. We will be at EPA today at 1 pm to inspect the first car.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, April 21, 2015 9:37 AM  
**To:** Glas, Tobias  
**Subject:** Parameters needed for V138RXX-0359 and V138RXX-0032

Hi, Tobias.

The following vehicle will be brought in next week:

V138RXX-0359 (2013 VW/Beetle) - Ex. 6 0830 vehicle pick  
up on 4/27/15 (Monday)

V138RXX-0032 (2013 VW/Passat) - Ex. 6, 0830 vehicle pick

up on 4/29/15 (Wednesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

Engine Fam.:	9ADXV03.23LC
Concept:	3.2I
Emission Standard:	LEVII/Bin5
Sales Area:	50 States / Canada
Engine HP:	265 hp
Models in TG:	Audi A4 and Audi A5

The program is still pending.

5.2– 5.4 The Volkswagen Group submits Emissions Defect Reports in accordance with the regulations specified in 40CFR 85.1903. In addition, the Volkswagen Group has internal processes in place to comply with the Volkswagen Consent Decree that took effect in November 2005.

6. Other Issues.

- 6.1 The Volkswagen Group plans to use the EPA recommended NMOG to NMHC ratio of 1.04 for all gasoline engine certification and in-use verification testing, and a ratio of 1.0 for diesel engine certification and in-use verification testing. Formaldehyde emission measurements will use a Statement of Compliance for certification and a HCHO to NMHC ratio of 0.03 for gasoline engine in-use verification testing. This factor is calculated from three years of Volkswagen Group data used to support certification over a wide range of engine concepts.
- 6.2 The Volkswagen Group is seeking confirmation of the EPA's continued approval of additional preconditioning for all in-use testing conducted on vehicles certified to meet California SULEV II emission standards, as referenced in CD-94-13, dated 7/29/1994, and in a letter from the Agency, dated 4/4/2002.

Sincerely,  
Volkswagen Group of America, Inc.

  
Christoph Kohnen  
Engineering and Environmental Office

Enclosures

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Mon 4/27/2015 1:28:56 PM  
**Subject:** RE: Parameters needed for V138RXX-0359 and V138RXX-0032  
V138 RXX-0032.xlsx  
V138 RXX-0359.xlsx

Hi Lynn,

Here are the test data for the two cars. We will be at EPA today at 1 pm to inspect the first car.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

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Cell: (248) 494-1537

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E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, April 21, 2015 9:37 AM  
**To:** Glas, Tobias  
**Subject:** Parameters needed for V138RXX-0359 and V138RXX-0032

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up on 4/27/15 (Monday)

V138RXX-0032 (2013 VW/Passat) – Ex. 6 0830 vehicle pick  
up on 4/29/15 (Wednesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851



**From:** **Ex. 4 - CBI**

**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov);

Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta

**Location:** Ann Arbor EPA LAB Garage 325 Area

**Importance:** Normal

**Subject:** M2 Pre-Test Inspection for V138RXX-0032

**Start Date/Time:** Wed 4/29/2015 4:30:00 PM

**End Date/Time:** Wed 4/29/2015 5:30:00 PM

M2 Pre-Test Inspection for V138RXX-0032

Please contact me if you have questions.

**Ex. 4 - CBI**

**From:** Ex. 4 - CBI

**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta

**Location:** Ann Arbor EPA LAB Garage 325 Area

**Importance:** Normal

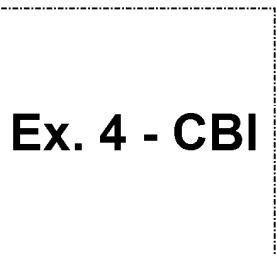
**Subject:** M2 Pre-Test Inspection for V138RXX-0359

**Start Date/Time:** Mon 4/27/2015 5:00:00 PM

**End Date/Time:** Mon 4/27/2015 6:00:00 PM

M2 Pre-Test Inspection for V138RXX-0359

Please contact me if you have questions.



**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Tue 4/21/2015 3:33:03 PM  
**Subject:** RE: Parameters needed for V138RXX-0359 and V138RXX-0032

Hi Lynn,

Thanks for the heads up. When can we stop by and inspect the cars ?

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, April 21, 2015 9:37 AM

**To:** Glas, Tobias  
**Subject:** Parameters needed for V138RXX-0359 and V138RXX-0032

Hi, Tobias.

The following vehicle will be brought in next week:

**V138RXX-0359 (2013 VW/Beetle)** – **Ex. 6** 0830 vehicle pick  
up on 4/27/15 (Monday)

**V138RXX-0032 (2013 VW/Passat)** – **Ex. 6**, 0830 vehicle pick  
up on 4/29/15 (Wednesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851



**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Fri 7/24/2015 2:23:05 PM  
**Subject:** RE: Test data for V149RXX-0097

Thanks, Tobias. If you are on vacation next week, I hope that you have a good time.

You enjoy your weekend as well.

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Friday, July 24, 2015 10:21 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Test data for V149RXX-0097

Hi Lynn,

Thanks, everything looks good to me.

I'll be out of the office next week but there should not be any more cars to inspect anyway.

Looking forward to get more passing results from you.

Have a nice weekend

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]

**Sent:** Friday, July 24, 2015 9:58 AM

**To:** Glas, Tobias

**Subject:** Test data for V149RXX-0097

Hi, Tobias,

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki

Environmental Engineer

Compliance Division

EPA

734-214-4851

**To:** Tobias.Glas@vw.com[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Fri 7/24/2015 1:57:45 PM  
**Subject:** Test data for V149RXX-0097  
V149RXX-0097 FTP PM.pdf  
V149RXX-0097 FTP.pdf  
V149RXX-0097 HWY.pdf  
V149RXX-0097 US06 PM.pdf  
V149RXX-0097 US06.pdf

Hi, Tobias,

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki  
Environmental Engineer  
Compliance Division  
EPA  
734-214-4851

**To:** Tobias.Glas@vw.com[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Thur 7/16/2015 2:04:33 PM  
**Subject:** Parameters needed for V149RXX-0308  
#current parameter form.xlsx

Hi, Tobias.

The following vehicle will be brought in next week:

V149RXX-0308 (2013 VW/Jetta TDI (diesel) – Ex. 6 07/23/15  
(Thursday) 0930 Vehicle Pick up

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851



**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 7/14/2015 3:27:15 PM  
**Subject:** RE: Parameters needed for V148RXX-0232

OK

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Tuesday, July 14, 2015 11:18 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Parameters needed for V148RXX-0232

Hi Lynn,

As along as the car passes I don't mind waiting. ☺

Yes, next Thursday will be fine, I'll be available all week.

Best regards

Tobias

**From:** Sohacki, Lynn [mailto:sohacki.lynn@epa.gov]  
**Sent:** Tuesday, July 14, 2015 11:09 AM  
**To:** Glas, Tobias  
**Subject:** RE: Parameters needed for V148RXX-0232

Hi, Tobias.

Sorry for the delay getting the data for V148RXX-0058 to you.

Thank for the parameters. We will let you know if we need the cold CO coefficients.

Will you be available next Thursday for the maintenance?

Best regards,

Lynn

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Tuesday, July 14, 2015 11:01 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Parameters needed for V148RXX-0232

Hi Lynn,

Here are the parameters for the next car.

If you need Cold CO coefficients for one of the cars, please let me know.

I never received a test result for V148RXX-0058, may be I missed it. Can you please send me the result again?

Thank you

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Tuesday, July 14, 2015 10:38 AM  
**To:** Glas, Tobias  
**Subject:** Parameters needed for V148RXX-0232

Hi, Tobias.

The following vehicle will be brought in next week:

**V148RXX-0232 (2013 VW/Jetta TDI (diesel))** -   **Ex. 6**   07/16/15  
(Thursday) 0700 Vehicle Pick up

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 7/14/2015 3:23:14 PM  
**Subject:** RE: Parameters needed for V148RXX-0232

Great! Thanks, Tobias! ☺

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Tuesday, July 14, 2015 11:18 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Parameters needed for V148RXX-0232

Hi Lynn,

As along as the car passes I don't mind waiting. ☺

Yes, next Thursday will be fine, I'll be available all week.

Best regards

Tobias

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, July 14, 2015 11:09 AM  
**To:** Glas, Tobias  
**Subject:** RE: Parameters needed for V148RXX-0232

Hi, Tobias.

Sorry for the delay getting the data for V148RXX-0058 to you.

Thank for the parameters. We will let you know if we need the cold CO coefficients.

Will you be available next Thursday for the maintenance?

Best regards,

Lynn

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Tuesday, July 14, 2015 11:01 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Parameters needed for V148RXX-0232

Hi Lynn,

Here are the parameters for the next car.

If you need Cold CO coefficients for one of the cars, please let me know.

I never received a test result for V148RXX-0058, may be I missed it. Can you please send me the result again?

Thank you

**Tobias Glas**

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Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Tuesday, July 14, 2015 10:38 AM  
**To:** Glas, Tobias  
**Subject:** Parameters needed for V148RXX-0232

Hi, Tobias.

The following vehicle will be brought in next week:

**V148RXX-0232 (2013 VW/Jetta TDI (diesel) -** [redacted] **Ex. 6** 07/16/15  
(Thursday) 0700 Vehicle Pick up

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Mon 7/13/2015 2:57:43 PM  
**Subject:** RE: Porsche Surveillance

Thanks, Tobias.

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Monday, July 13, 2015 9:04 AM  
**To:** Sohacki, Lynn; Maury, Mark; Liebner, Bernd  
**Cc:** Ross Gatzke (Ross.Gatzke@porsche.us); Smith, Brett (EEO)  
**Subject:** Porsche Surveillance

Hi Lynn,

Please see attached the data file for the Golf TDI we will inspect on Wednesday.

We will also take the Porsche Surveillance car out of the dyno mode so it can be returned to the customer and take the Porsche tester and the flanges with us while we are there.

Let me know if you need any more information.

See you on Wednesday.

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Pidgeon, Bill[pidgeon.bill@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Wed 12/3/2014 9:05:24 PM  
**Subject:** 30 year annual average heating degree days

Hi Bill,

I was looking into the definition for the definition of warm/ cold areas for the In Use procurement and only found an old link to map that doesn't exist anymore.

Do you by any chance have an actual map or a link to one that shows that map for the US?

Thanks for your help and best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

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3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Wehrly, Linc

**Required Attendees:** Bunker, Byron; Snyder, Jim; Ball, Joel; Wright, DavidA; Ott, William; Pidgeon, Bill; Dalton, Joel; Olechiw, Michael; Fernandez, Antonio; Nam, Ed; Ex. 7

Ex. 7

**Location:** AA-Room-Office-N95-ConfRoom-AAOTAQ-Office

**Importance:** Normal

**Subject:** Discussion of diesel vehicle off-cycle emissions with VW

**Start Date/Time:** Mon 10/20/2014 2:00:00 PM

**End Date/Time:** Mon 10/20/2014 3:00:00 PM

**To:** Tobias.Glas@vw.com[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 7/8/2015 5:33:33 PM  
**Subject:** Parameters needed for V149RXX-0097 (2013 VW/Golf TDI (Diesel)  
#current parameter form.xlsx

Hi, Tobias.

The following vehicle will be brought in next week:

**V149RXX-0097 (2013 VW/Golf TDI (Diesel) –** Ex. 6, 0900  
Vehicle Pick on 7/14/15 (Tuesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Tobias.Glas@vw.com[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 6/23/2015 5:57:10 PM  
**Subject:** Test Data for **Ex. 4 - CBI**  
**Ex. 4 - CBI**

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki  
Environmental Engineer  
Compliance Division  
EPA  
734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 6/16/2015 6:43:49 PM  
**Subject:** RE: Schedule for 2 additional vehicles from class V148/V149

Great. Thanks,

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Tuesday, June 16, 2015 2:35 PM  
**To:** Sohacki, Lynn  
**Cc:** Liebner, Bernd  
**Subject:** RE: Schedule for 2 additional vehicles from class V148/V149

Hi Lynn,

that is perfectly fine. I'll be back in the office on July 1<sup>st</sup> and will be available the rest of July.

Thanks for your help

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Tuesday, June 16, 2015 11:12 AM  
**To:** Glas, Tobias  
**Cc:** Liebner, Bernd  
**Subject:** Schedule for 2 additional vehicles from class V148/V149

Hi, Tobias.

Jacobs suggested bringing in the two additional vehicles during the week ending 7/24/15. Will that work for you?

Lynn Sohacki

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

**To:** Tobias.Glas@vw.com[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 6/16/2015 1:30:00 PM  
**Subject:** Test data for [REDACTED] Ex. 7  
V148RXX-0090.pdf

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki

Environmental Engineer

Compliance Division

EPA

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Thur 6/4/2015 8:02:30 PM  
**Subject:** RE: V148RXX-0058

Thanks, Tobias.

Have a nice weekend.

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Thursday, June 04, 2015 3:58 PM  
**To:** Sohacki, Lynn  
**Subject:** Re: V148RXX-0058

Hi Lynn,

I am very sorry about how this is handled by VW. Please proceed with the EPA standard shift pattern.

Best regards

Tobias Glas

Sent from my iPhone

On Jun 4, 2015, at 12:38 PM, Sohacki, Lynn <[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)> wrote:

HI, Tobias.

We do not have a shift schedule that matches that shift pattern. We will either need a shift schedule from VW or we will need to use the EPA standard shift schedule that does not match the shift pattern you have indicated below.

Thanks,

Lynn

**From:** Glas, Tobias [<mailto:Tobias.Glas@vw.com>]  
**Sent:** Wednesday, June 03, 2015 12:59 PM  
**To:** Sohacki, Lynn  
**Subject:** RE: V148RXX-0058

I'll be out of the office the rest of the week but will be able to read emails.

So send me an email if there are any questions and I will get back to you.

Best regards

Tobias

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Wednesday, June 03, 2015 12:56 PM  
**To:** Glas, Tobias  
**Subject:** RE: V148RXX-0058

Thanks, Tobias.

Lynn

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Wednesday, June 03, 2015 12:55 PM  
**To:** Sohacki, Lynn  
**Subject:** RE: V148RXX-0058

Hi Lynn,

I am sorry for the delay, I was hoping to get a confirmation from Germany.

So please use the same shift points as for the FTP. That is what we have in the Common sections.

**FTP / HWY Shift Points: (Manual Transmission)**

<b>Shift ID</b>	<b>1-2</b>	<b>2-3</b>	<b>3-4</b>	<b>4-5</b>	<b>5-6</b>	<b>CEFIS No.</b>	<b>CFIS No.</b>	<b>Remarks</b>
M6-1	15	25	40	47	52	590 0035	590 0036	HWY
								FTP

M6-1    15    25    40    47    52    590 0035 590 0036

Let me know if you need any more details.

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Thursday, May 28, 2015 2:04 PM  
**To:** Glas, Tobias  
**Subject:** RE: V148RXX-0058

Thanks, Tobias.

Lynn

**From:** Glas, Tobias [<mailto:Tobias.Glas@vw.com>]  
**Sent:** Thursday, May 28, 2015 1:55 PM  
**To:** Sohacki, Lynn; Maury, Mark  
**Subject:** V148RXX-0058

Hi Lynn,

And here are the test data for the Jetta Wagen stick.

I am waiting for Germany to send me the US06 shifting points, my guess is I'll have them by tomorrow.

**FTP / HWY Shift Points: (Manual Transmission)**

<b>Shift ID</b>	<b>1-2</b>	<b>2-3</b>	<b>3-4</b>	<b>4-5</b>	<b>5-6</b>	<b>CEFIS No.</b>	<b>CFIS No.</b>	<b>Remarks</b>
M6-1	15	25	40	47	52	590 0035	590 0036	HWY FTP

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

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3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**Cc:** Liebner, Bernd[liebner.bernd@epa.gov]; Hoban, John[Hoban.John@epa.gov]; Maury, Mark[maury.mark@epa.gov]  
**From:** Sohacki, Lynn  
**Sent:** Thur 5/28/2015 5:27:16 PM  
**Subject:** FW: TDI defueling  
VW fuel drain.pdf

Hi, Tobias.

Could you please provide some clarification on energizing the pump in the defueling procedure for this vehicle?

Thanks.

Lynn

**From:** Maury, Mark  
**Sent:** Thursday, May 28, 2015 12:29 PM  
**To:** Liebner, Bernd; Sohacki, Lynn  
**Cc:** Hoban, John  
**Subject:** FW: TDI defueling

Tobias sent procedure, need clarification on energizing pump

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Thursday, May 28, 2015 9:30 AM  
**To:** Maury, Mark  
**Subject:** TDI defueling

Hi Mark,

on page 7 you see a picture that shows which fuel line you can use to defuel the TDI.

I'll send the test data in a bit.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

# Fuel drain for vehicle preconditioning

---

# Instruction manual

## powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



# Fuel drain for vehicle preconditioning

---

## Vehicle preparation (for example: gasoline)

->diesel see page 7

1. Close the fuel line, mount a crimp pincer (yellow), see page 4.
2. Disconnect the fuel line from rail in the engine compartment.
3. Connect the T-piece between rail and fuel line with clips, see page 5.  
**Attention:** Carefully check all clips in the fuel line before you start the engine  
or pump!
4. Open the fuel line, remove the crimp pincer.

## Description of fuel drain (gasoline and diesel)

1. Change the original against a external prepared connector on the fuel pump.
2. Connect a drain line with a male connector at the quickconnector (QC).
3. Switch on the pump with external DC power supply (Voltage:12V/Current:20A).
4. After the fuel drain switch off the power supply.
5. Disconnect the drain line from the selfsealing female QC and close the QC with plug.

➤ Look at the following pictures

---

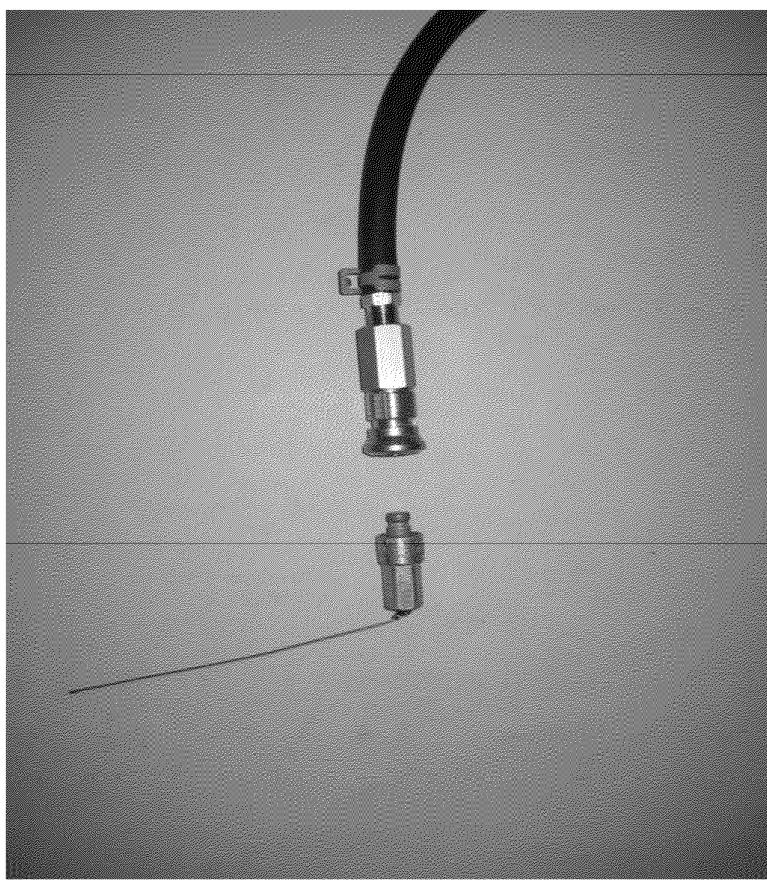
## powertrain development

---



# Fuel drain for vehicle preconditioning

T-piece for fuel draining with selfsealing connector and plug (swagelok QC6)



## powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung

page 3

date: 04/07/2009

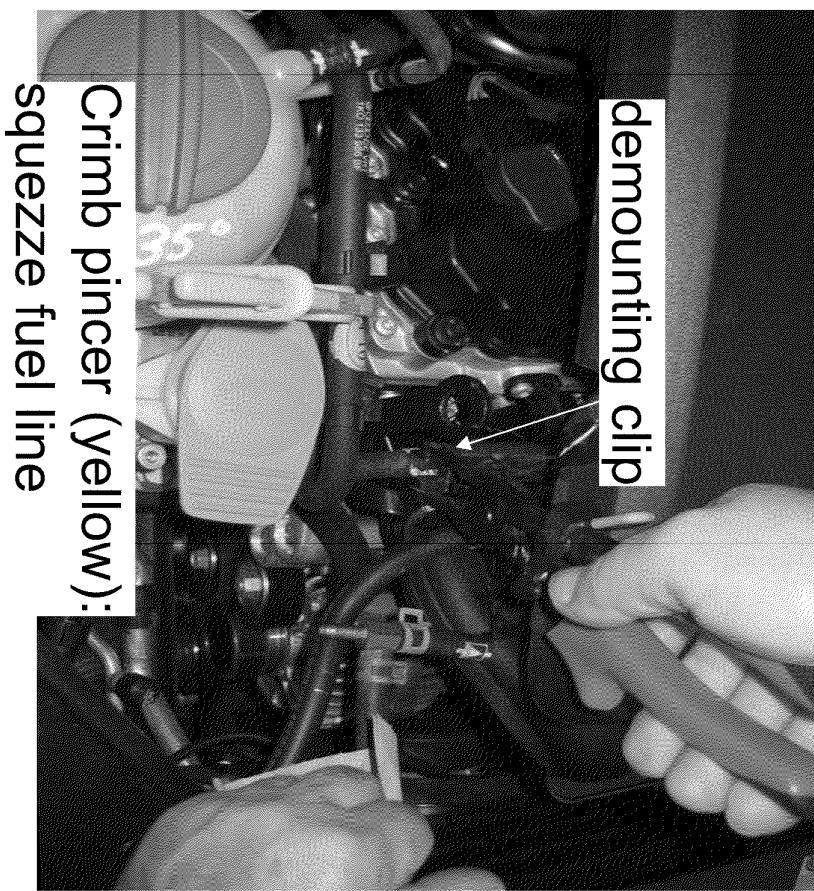
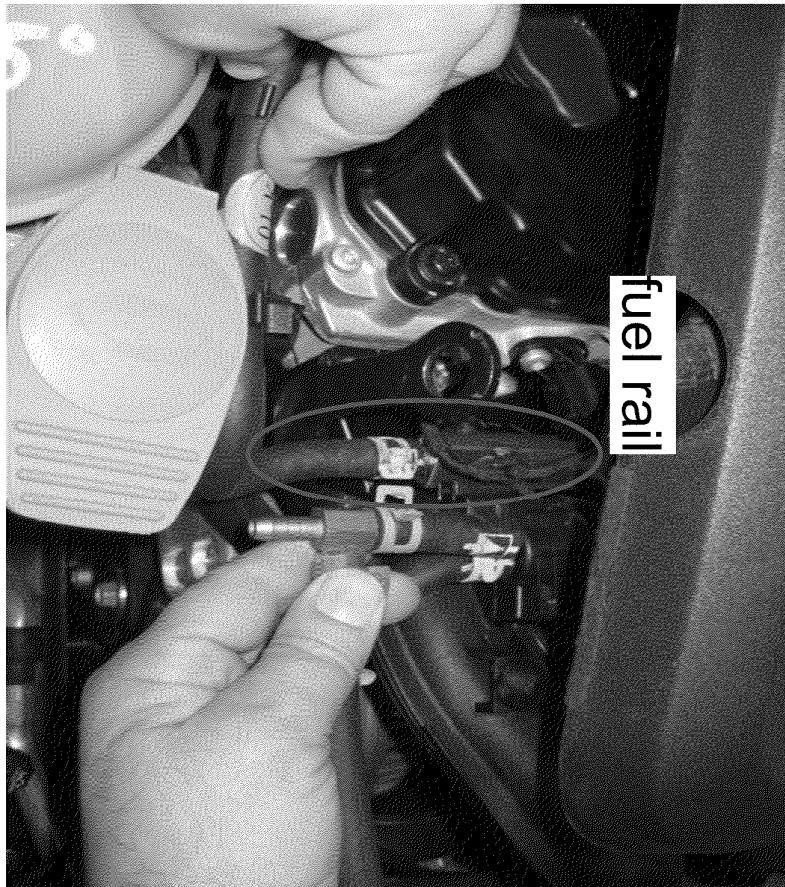
Autor.: Ratte

phone: +0049-5361-9-31763



# Fuel drain for vehicle preconditioning

*gasoline vehicle:* connection of T-piece in the fuel rail (engine compartment)



## powertrain development

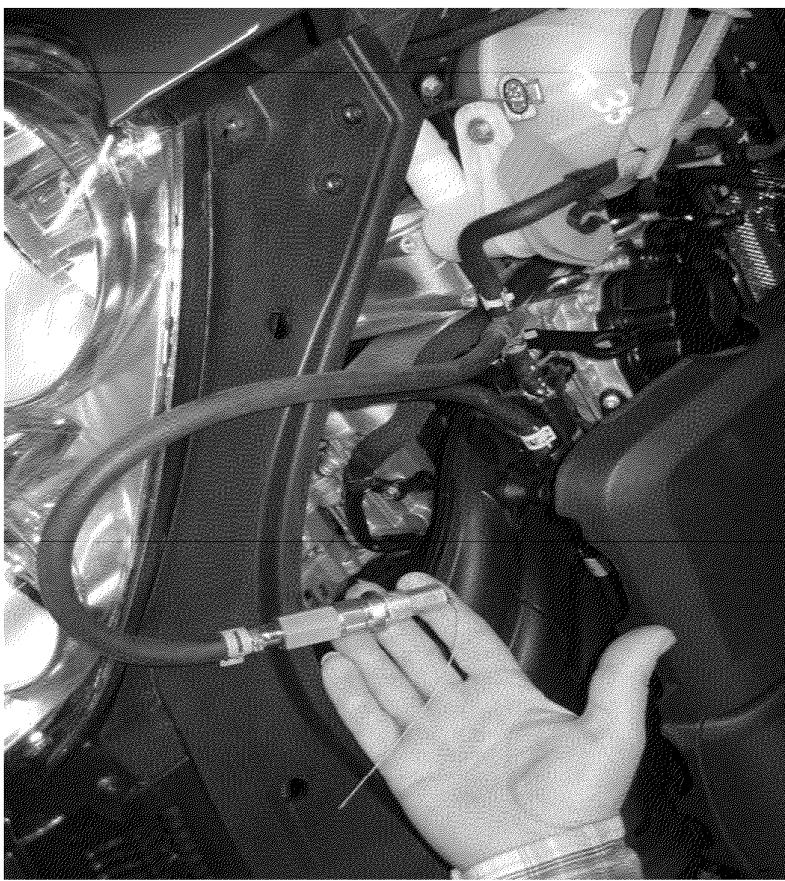
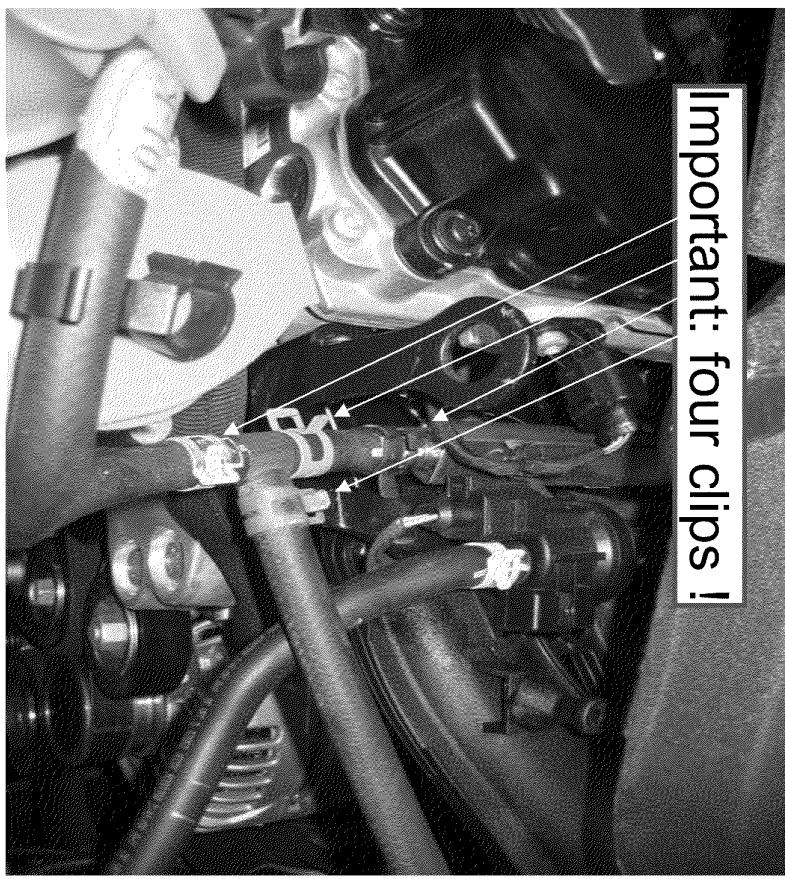
Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



# Fuel drain for vehicle preconditioning

*gasoline vehicle:* connection of T-piece in the fuel rail (engine compartment)

Important: four clips!



## powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung

page 5

date: 04/07/2009

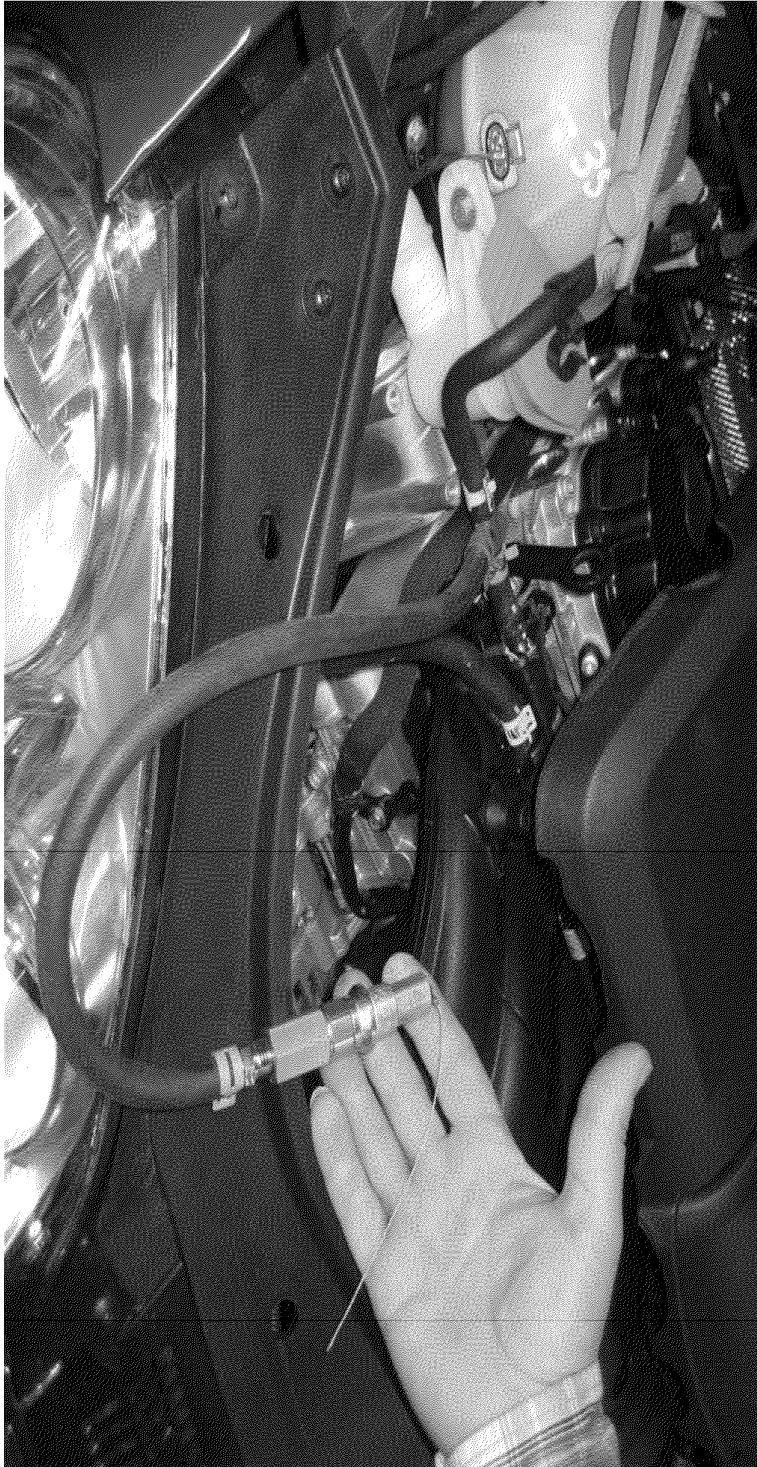
Autor.: Ratte

phone: +0049-5361-9-31763



# Fuel drain for vehicle preconditioning

**gasoline vehicle:** T-piece in the fuel rail (engine compartment) Attention:  
check all clips (four) in the fuel line before you start the engine !



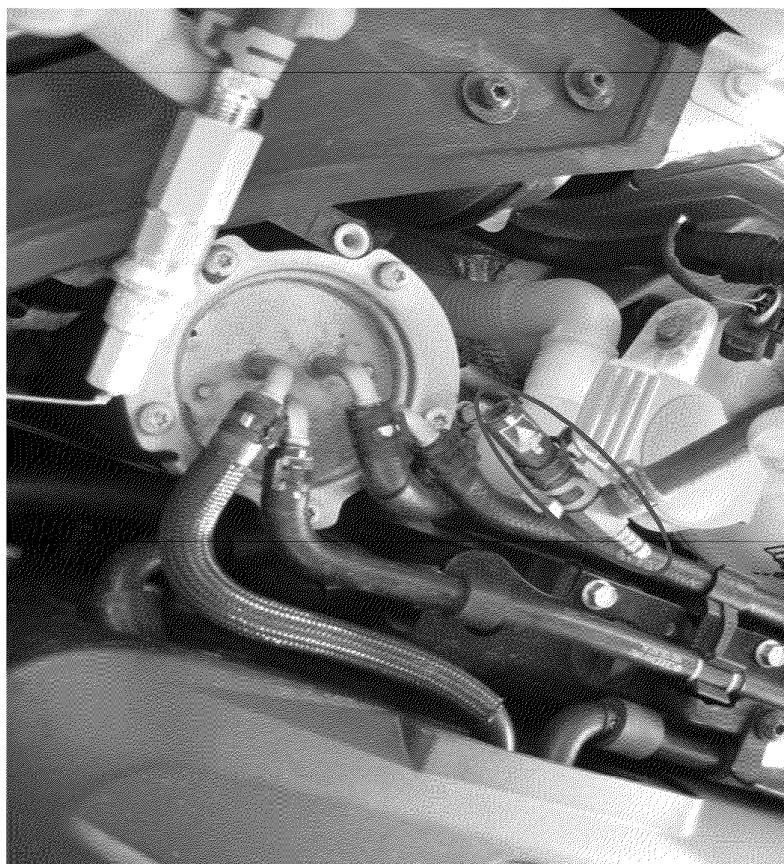
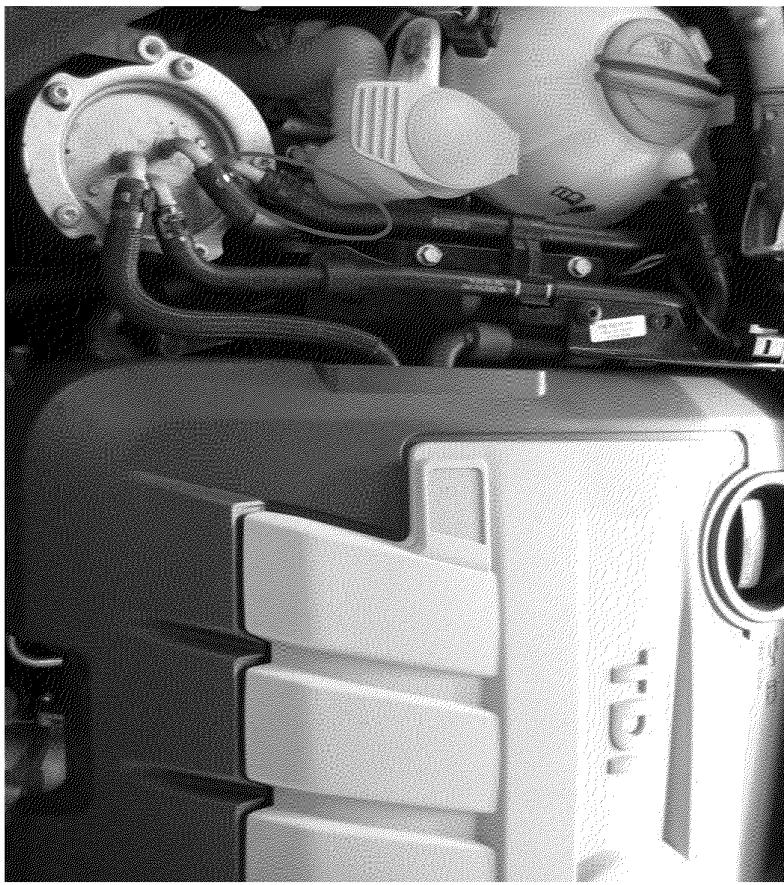
## powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



# Fuel drain for vehicle preconditioning

*diesel vehicle:* connection of T-piece in the fuel rail (engine compartment)



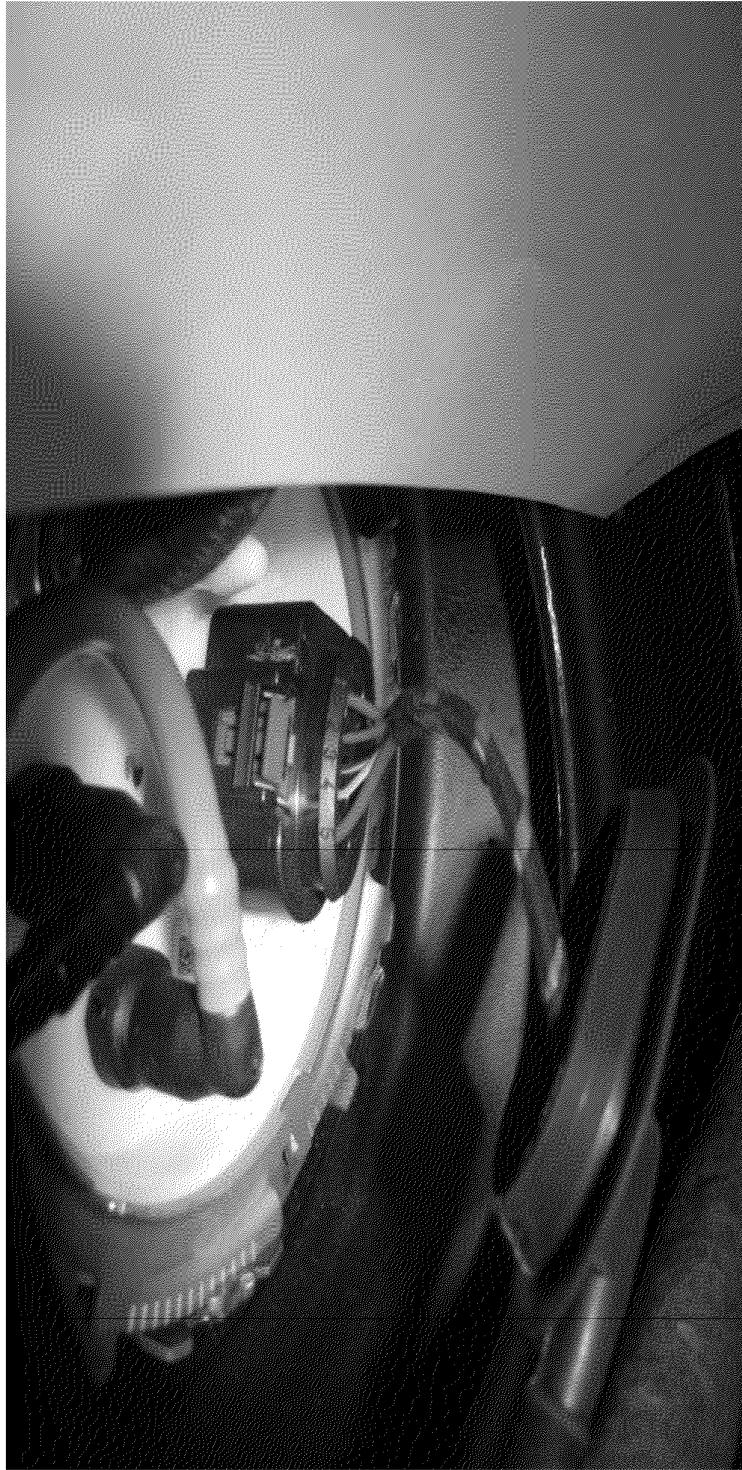
## powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



# Fuel drain for vehicle preconditioning

Fuel pump, electrical connector, original part (rear seats, right hand side)



## powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung

page 8

date: 04/07/2009

Autor.: Ratte

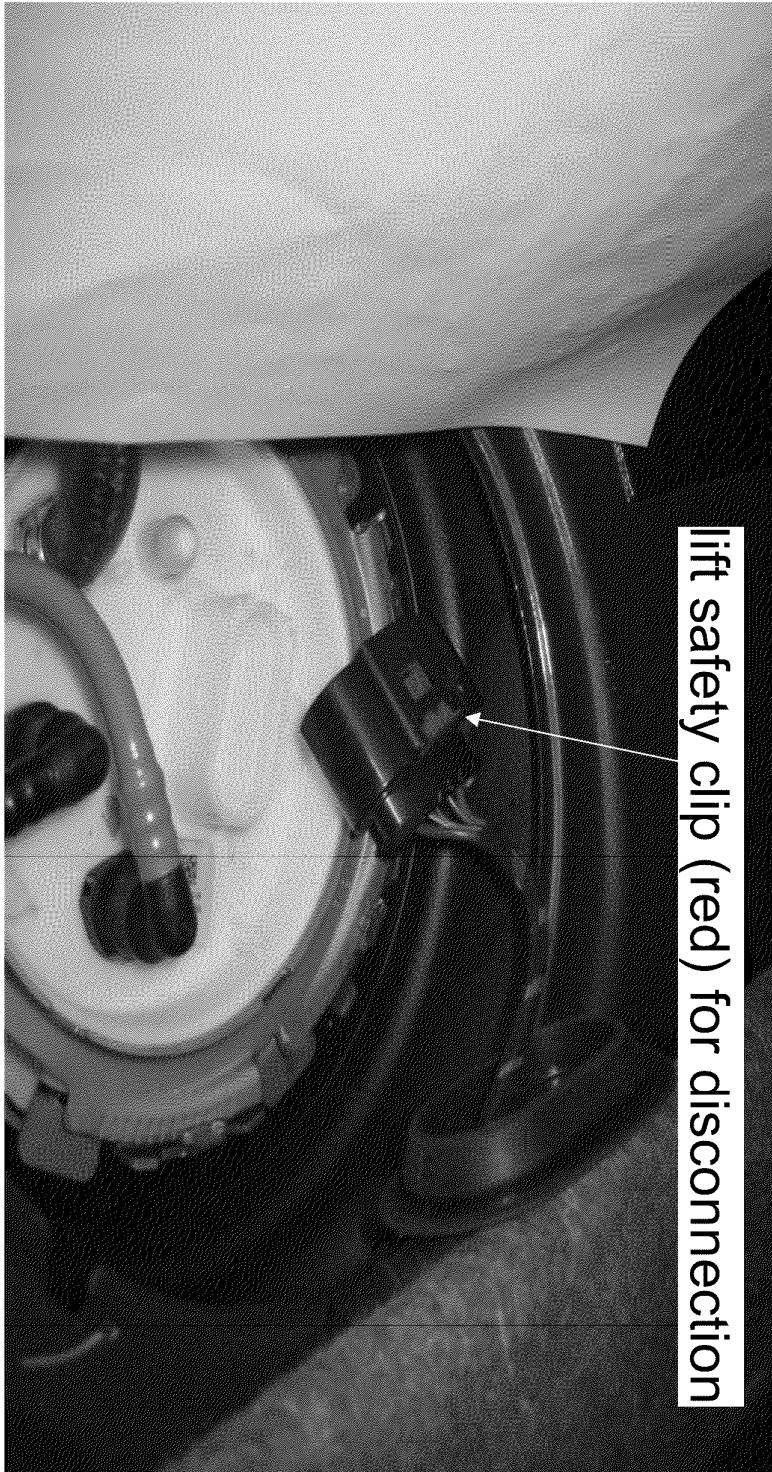
phone: +0049-5361-9-31763



# Fuel drain for vehicle preconditioning

Fuel pump, electrical connector, disconnect original part

lift safety clip (red) for disconnection



## powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung

page 9

date: 04/07/2009

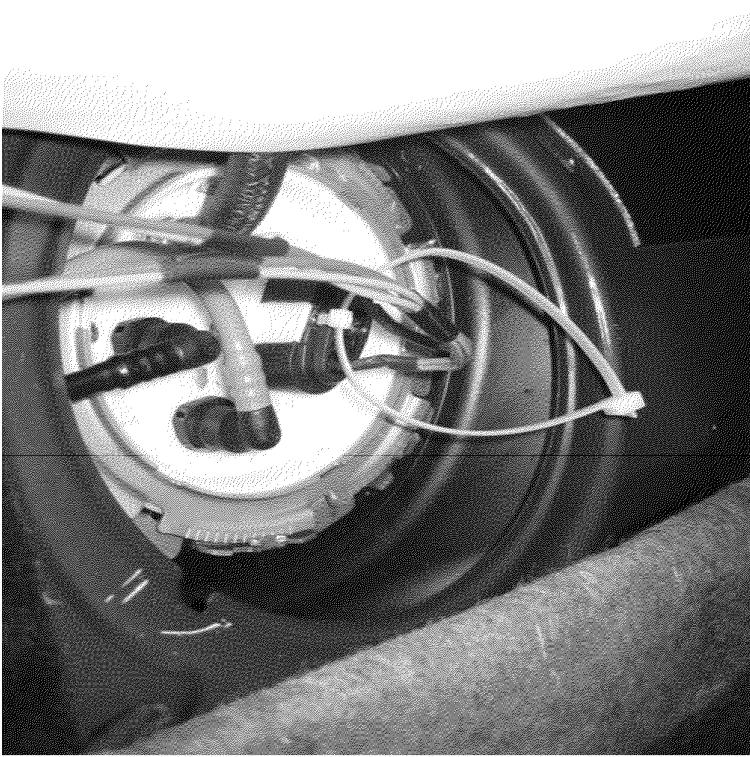
Autor.: Ratte

phone: +0049-5361-9-31763



# Fuel drain for vehicle preconditioning

Fuel pump, external electrical connector with DC power supply (red wire = plus blue or brown wire = negative pole)



## powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 5/27/2015 5:06:33 PM  
**Subject:** Parameters needed for V148RXX-0090  
#current parameter form.xlsx

Hi, Tobias.

The following vehicle will be brought in next week:

**V148RXX-0090 (2013 VW/Jetta (diesel)) – VIN# 3VWPL7AJ0DM684649, 0700 Vehicle**  
Pick up on 6/1/15 (Monday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 5/20/2015 7:23:41 PM  
**Subject:** Parameters needed for V148RXX-0058  
#current parameter form.xlsx

Hi, Tobias.

The following vehicle will be brought in next week:

**V148RXX-0058 (2013 VW/Jetta diesel)** – VIN# 3VWML7AJXDM611257, 0830 Vehicle  
Pick up on 5/27/15 (Wednesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 5/20/2015 6:10:36 PM  
**Subject:** Test data for [redacted] Ex. 7

# Ex. 7

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki

Environmental Engineer

Compliance Division

EPA

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Mon 5/11/2015 7:38:52 PM  
**Subject:** Test data for V138-0032  
V138RXX-0032 US06.pdf  
V138RXX-0032 evap.pdf  
V138RXX-0032 FTP.pdf  
V138RXX-0032 HWY.pdf

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki  
Environmental Engineer  
Compliance Division  
EPA  
734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 5/6/2015 6:32:20 PM  
**Subject:** test data for

Ex. 7

Ex. 7

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki

Environmental Engineer

Compliance Division

EPA

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 5/5/2015 1:42:53 PM  
**Subject:** RE: Parameters needed for

**Ex. 7**

Thanks, Tobias!

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]

**Sent:** Tuesday, May 05, 2015 9:08 AM

**To:** Sohacki, Lynn

**Subject:** RE: Parameters needed for

**Ex. 7**

Hi Lynn,

See attached file.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]

**Sent:** Tuesday, May 05, 2015 8:52 AM

**To:** Glas, Tobias

**Subject:** FW: Parameters needed for

Ex. 7

Hi, Tobias.

When you have a chance, would you please send the parameters for this vehicle?

Thanks so much,

Lynn

**From:** Sohacki, Lynn

**Sent:** Tuesday, April 28, 2015 3:52 PM

**To:** Glas, Tobias

**Subject:** Parameters needed for

Ex. 7

Hi, Tobias.

The following vehicle will be brought in next week:

## Ex. 7

Vehicle Pick

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Thur 4/30/2015 3:06:49 PM  
**Subject:** RE: Notification of EPA In-use class V148/V149

Hi, Tobias.

I'm glad we were able to catch up yesterday. I'll notify you when the vehicles are ready to be brought in.

Thanks,

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Thursday, April 30, 2015 11:04 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Notification of EPA In-use class V148/V149

Hi Lynn,

Ohh, back to back Surveillance testing! 😊

Not a problem, let us know when you found cars and we will be there.

Talk to you soon.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Thursday, April 30, 2015 10:56 AM  
**To:** Glas, Tobias  
**Subject:** Notification of EPA In-use class V148/V149

Hi, Tobias.

I recently sent a letter to your company as notification of an upcoming in-use class. Attached, please find a copy of that letter for your convenience. Let me know if you have any questions.

Thank you,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Thur 4/30/2015 2:56:07 PM  
**Subject:** Notification of EPA In-use class V148/V149  
[Notif-V148-VW.pdf](#)

Hi, Tobias.

I recently sent a letter to your company as notification of an upcoming in-use class. Attached, please find a copy of that letter for your convenience. Let me know if you have any questions.

Thank you,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY  
2565 PLYMOUTH ROAD  
ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF  
AIR AND RADIATION

April 29, 2015

Mr. Tobias Glas  
Volkswagen of America  
3800 Hamlin Road  
Auburn Hills, MI 48326

Dear Mr. Glas,

The Environmental Protection Agency will test a Volkswagen model-year 2013 test-group in our surveillance test-program. The group shown in Enclosure 1 will be tested at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan. Test results which exceed applicable standards may lead to confirmatory testing.

A sample of three or more vehicles will be procured. Maintenance will consist of an under-hood inspection and review of on-board computer codes. The federal test procedure, highway cycle, and US06 test will follow a single LA-4 preconditioning cycle. If this test-group contains models which are two-wheel drive with selectable four-wheel drive or selectable all-wheel drive, the vehicles may be tested in either of these modes.

Vehicles in the class may be subjected to an evaporative test and/or Cold CO testing. EPA will also be collecting data from the vehicles' fuel economy displays when so equipped. Additionally, fault conditions may be introduced on one or more of the vehicles to test the response of the On-Board Diagnostics (OBD) system.

We invite your representatives to be present as observers during the test program. If you have any questions concerning this investigation please contact me.

Sincerely,

Lynn Sohacki  
Compliance Division

Enclosure

ENCLOSURE 1

Lab

NVFEL  
Ann Arbor, Michigan

Test Group

**Ex. 7**

Estimated Start Date

Week-ending 7/3/2015

Recall/Testing Representative

Lynn Sohacki

Telephone Number

(734) 214-4851

E-mail address

Sohacki.lynn@epa.gov

Class Numbers

V148/V149 (low-mileage / high-mileage)

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**Cc:** Mazaitis, Vincent[mazaitis.vincent@epa.gov]  
**From:** Sohacki, Lynn  
**Sent:** Wed 4/29/2015 12:53:43 PM  
**Subject:** RE: Parameters needed for V

Ex. 7

Hi, Tobias.

Thanks for your email requesting additional preconditioning for the vehicles in class

Ex. 7

EPA currently runs a road load cycle and a preconditioning cycle before a vehicle is tested. This is usually sufficient for stabilizing vehicles before testing.

Although the letter you submitted gave permission for additional preconditioning for in-use testing in 20002, I would like more up-to-date information about the reasons that this test group requires additional preconditioning before agreeing that such preconditioning is necessary for EPA's current in-use testing.

I look forward to seeing you this afternoon at 12:30 for the maintenance.

Regards,

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Monday, April 27, 2015 10:23 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Parameters needed for

Ex. 7

Hi Lynn,

We found the letter and we should be able to do a UDDS and a HFET for Preconditioning.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Glas, Tobias  
**Sent:** Monday, April 27, 2015 10:11 AM  
**To:** 'Sohacki, Lynn'  
**Subject:** RE: Parameters needed fo

**Ex. 7**

Hi Lynn,

As this is a SULEV II car we have the chance to do an extra Preconditioning on the car as we stated in the Cert Preview List. See attachment point 6.2.

I am checking the documents that are referenced there right now.

Talk to you soon

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]  
**Sent:** Monday, April 27, 2015 10:02 AM  
**To:** Glas, Tobias

**Subject:** RE: Parameters needed for

**Ex. 7**

Thank you, Tobias.

Regards,

Lynn

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]

**Sent:** Monday, April 27, 2015 9:29 AM

**To:** Sohacki, Lynn

**Subject:** RE: Parameters needed for

**Ex. 7**

Hi Lynn,

Here are the test data for the two cars. We will be at EPA today at 1 pm to inspect the first car.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]

**Sent:** Tuesday, April 21, 2015 9:37 AM

**To:** Glas, Tobias

**Subject:** Parameters needed for

**Ex. 7**

Hi, Tobias.

The following vehicle will be brought in next week:

**Ex. 7**

up on 4/27/15 (Monday)

vehicle pick

**Ex. 7**

up on 4/29/15 (Wednesday)

vehicle pick

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 4/28/2015 8:06:45 PM  
**Subject:** RE: Update

Thank you, Tobias.

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Monday, April 27, 2015 3:58 PM  
**To:** Sohacki, Lynn  
**Subject:** Update

Hi Lynn,

The Beetle is a Convertible, so here are the updated weight and coefficients.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Mon 4/27/2015 2:02:12 PM  
**Subject:** RE: Parameters needed for

Ex. 7

Thank you, Tobias.

Regards,

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Monday, April 27, 2015 9:29 AM  
**To:** Sohacki, Lynn  
**Subject:** RE: Parameters needed for

Ex. 7

Hi Lynn,

Here are the test data for the two cars. We will be at EPA today at 1 pm to inspect the first car.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]

**Sent:** Tuesday, April 21, 2015 9:37 AM

**To:** Glas, Tobias

**Subject:** Parameters needed for

**Ex. 7**

Hi, Tobias.

The following vehicle will be brought in next week:

**Ex. 7**

0830 vehicle pick

**Ex. 7**

0830 vehicle pick

up on 4/29/15 (Wednesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When

including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**Cc:** Hoban, John[Hoban.John@epa.gov]  
**From:** Sohacki, Lynn  
**Sent:** Tue 4/21/2015 3:51:47 PM  
**Subject:** RE: Parameters needed for

[redacted] **Ex. 7**

HI, Tobias.

John Hoban, of Jacobs technologies, schedules the maintenances. He usually emails representatives with the times of the maintenances but you can email him at [hoban.john@epa.gov](mailto:hoban.john@epa.gov) or call him at 734-214-4597.

Regards,

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Tuesday, April 21, 2015 11:33 AM

**To:** Sohacki, Lynn  
**Subject:** RE: Parameters needed for

[redacted] **Ex. 7**

Hi Lynn,

Thanks for the heads up. When can we stop by and inspect the cars ?

Best regards

Tobias Glas

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]

**Sent:** Tuesday, April 21, 2015 9:37 AM

**To:** Glas, Tobias

**Subject:** Parameters needed for

**Ex. 7**

Hi, Tobias.

The following vehicle will be brought in next week:

**Ex. 7**

up on 4/27/15 (Monday)

0830 vehicle pick

**Ex. 7**

up on 4/29/15 (Wednesday)

0830 vehicle pick

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 4/21/2015 1:36:47 PM  
**Subject:** Parameters needed for  
#current parameter form.xlsx

**Ex. 7**

Hi, Tobias.

The following vehicle will be brought in next week:

**Ex. 7**

0830 vehicle pick

up on 4/27/15 (Monday)

**Ex. 7**

0830 vehicle pick

up on 4/29/15 (Wednesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851



**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Mon 3/9/2015 8:55:44 PM  
**Subject:** Notification of EPA in-use test class

**Ex. 7**

**Ex. 7**

Hi, Tobias.

I recently sent a letter to your company as notification of an upcoming in-use class. Attached, please find a copy of that letter for your convenience. Let me know if you have any questions.

Thank you,

Lynn Sohacki  
Compliance Division  
Environmental Protection Agency  
734-214-4851  
734-214-4869 fax



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY  
2565 PLYMOUTH ROAD  
ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF  
AIR AND RADIATION

March 9, 2015

Mr. Berenz Sebastian  
Volkswagen of America  
3800 Hamlin Road  
Auburn Hills, MI 48326

Dear Mr. Sebastian,

The Environmental Protection Agency will test a 2013 model-year Volkswagen test-group in our surveillance test-program. The group shown in Enclosure 1 will be tested at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan. Test results which exceed applicable standards may lead to confirmatory testing.

A sample of three or more vehicles will be procured. Maintenance will consist of an under-hood inspection and review of on-board computer codes. The federal test procedure, highway cycle, and US06 test will follow a single LA-4 preconditioning cycle. If this test-group contains models which are two-wheel drive with selectable four-wheel drive or selectable all-wheel drive, the vehicles may be tested in either of these modes.

Vehicles in the class may be subjected to an evaporative test and/or Cold CO testing. Additionally, fault conditions may be introduced on one or more of the vehicles to test the response of the On-Board Diagnostics (OBD) system.

We invite your representatives to be present as observers during the test program. If you have any questions concerning this investigation please contact me.

Sincerely,

A handwritten signature in cursive ink that reads "Lynn Sohacki".

Lynn Sohacki  
Compliance Division

Enclosure

ENCLOSURE 1

Lab

NVFEL  
Ann Arbor, Michigan

Test Group

**Ex. 7**

Estimated Start Date

Week-ending 5/22/2015

Recall/Testing Representative

Lynn Sohacki

Telephone Number

(734) 214-4851

E-mail address

Sohacki.lynn@epa.gov

Class Numbers

**Ex. 7**

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta; Smith, Brett (EEO)  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:**  Ex. 7

**Start Date/Time:** Thur 7/23/2015 4:30:00 PM  
**End Date/Time:** Thur 7/23/2015 5:30:00 PM

M2 Pre-test Inspection for

**Ex. 7**

Please contact me if you have questions.

**John Hoban**  
**Project Engineer**  
**Jacobs Technology**  
EPA Contractor  
[hoban.john@epa.gov](mailto:hoban.john@epa.gov)  
Desk 734-214-4597  
Cell 517-285-2037

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** M2 Pre-test Inspection for \ Ex. 7  
**Start Date/Time:** Mon 7/20/2015 12:30:00 PM  
**End Date/Time:** Mon 7/20/2015 1:30:00 PM

M2 Pre-test Inspection for V148RXX-0232

Please contact me if you have questions.

**John Hoban**  
**Project Engineer**  
**Jacobs Technology**  
EPA Contractor  
[hoban.john@epa.gov](mailto:hoban.john@epa.gov)  
Desk 734-214-4597  
Cell 517-285-2037

**From:** Knott, Dave  
**Required Attendees:** Sohacki, Lynn; Liebner, Bernd; Hoban, John;  
tobias.glas@vw.com  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** M2 Pre-Test Maintenance **Ex. 7**  
**Start Date/Time:** Wed 7/15/2015 12:30:00 PM  
**End Date/Time:** Wed 7/15/2015 2:00:00 PM

**Ex. 7**

**2013 VW/Golf TDI (Diesel)**

SORRY for the confusion Wed 7-15 at 8:30 AM

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** Special Inspection for  Ex. 7  
**Start Date/Time:** Mon 6/15/2015 12:30:00 PM  
**End Date/Time:** Mon 6/15/2015 1:30:00 PM

Special Inspection fo  Ex. 7

Please contact me if you have questions.

**John Hoban**  
**Project Engineer**  
**Jacobs Technology**  
EPA Contractor  
[hoban.john@epa.gov](mailto:hoban.john@epa.gov)  
Desk 734-214-4597  
Cell 517-285-2037

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** M2 Pre-Test Inspection for Ex. 7  
**Start Date/Time:** Mon 6/1/2015 4:30:00 PM  
**End Date/Time:** Mon 6/1/2015 5:30:00 PM

M2 Pre-Test Inspection for

Ex. 7

Please contact me if you have questions.

**John Hoban**  
**Project Engineer**  
**Jacobs Technology**  
EPA Contractor  
[hoban.john@epa.gov](mailto:hoban.john@epa.gov)  
Desk 734-214-4597  
Cell 517-285-2037

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** M2 Pre-Test Inspection for [redacted]  
**Start Date/Time:** Wed 5/27/2015 4:30:00 PM  
**End Date/Time:** Wed 5/27/2015 5:30:00 PM

M2 Pre-Test Inspection fo [redacted] **Ex. 7**

Please contact me if you have questions.

**John Hoban**  
**Project Engineer**  
**Jacobs Technology**  
EPA Contractor  
[hoban.john@epa.gov](mailto:hoban.john@epa.gov)  
Desk 734-214-4597  
Cell 517-285-2037

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Mazaitis, Vincent; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** M2 Pre-Test Inspection for [redacted] **Ex. 7**  
**Start Date/Time:** Tue 5/5/2015 4:00:00 PM  
**End Date/Time:** Tue 5/5/2015 5:30:00 PM

M2 Pre-Test Inspection for [redacted] **Ex. 7**

Please contact me if you have questions.

**John Hoban**  
**Project Engineer**  
**Jacobs Technology**  
EPA Contractor  
[hoban.john@epa.gov](mailto:hoban.john@epa.gov)  
Desk 734-214-4597  
Cell 517-285-2037

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** M2 Pre-Test Inspection for [REDACTED] **Ex. 7**

**Start Date/Time:** Wed 4/29/2015 [REDACTED]  
**End Date/Time:** Wed 4/29/2015 5:30:00 PM

M2 Pre-Test Inspection for [REDACTED] **Ex. 7**

Please contact me if you have questions.

**John Hoban**  
**Project Engineer**  
**Jacobs Technology**  
EPA Contractor  
[hoban.john@epa.gov](mailto:hoban.john@epa.gov)  
Desk 734-214-4597  
Cell 517-285-2037

**From:** Hoban, John  
**Required Attendees:** tobias.glas@vw.com; Lynn Sohacki (sohacki.lynn@epa.gov); Liebner, Bernd; Dave Knott (Knott.Dave@epa.gov); Cieslak, Kim; Munoz, Mirta  
**Location:** Ann Arbor EPA LAB Garage 325 Area  
**Importance:** Normal  
**Subject:** M2 Pre-Test Inspection fo [redacted] **Ex. 7**  
**Start Date/Time:** Mon 4/27/2015 5:00:00 PM  
**End Date/Time:** Mon 4/27/2015 6:00:00 PM

M2 Pre-Test Inspection fo [redacted] **Ex. 7**

Please contact me if you have questions.

**John Hoban**  
**Project Engineer**  
**Jacobs Technology**  
EPA Contractor  
[hoban.john@epa.gov](mailto:hoban.john@epa.gov)  
Desk 734-214-4597  
Cell 517-285-2037

**To:** [REDACTED] Ex. 7 @vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Sohacki, Lynn  
**Sent:** Wed 1/21/2015 9:04:23 PM  
**Subject:** RE: Verify

Hi, [REDACTED] Ex. 7

The regulations require a plan that is usually submitted with the cert preview document at the cert preview meeting. Since the plan was not developed before the cert preview meeting, it would be best for VW to submit to the Verify document module the IUPV plan which indicates the test groups that are subject to the small manufacturer exemption.

If possible, this new information should be added to the certification preview document and saved as "updated preview document" or "certification preview document with IUPV information."

I hope this answers your question. Please contact me if you need more information.

Thanks,

Lynn

**From:** [REDACTED] Ex. 7 @vw.com]  
**Sent:** Tuesday, January 13, 2015 5:52 PM  
**To:** Sohacki, Lynn; Snyder, Jim  
**Cc:** [REDACTED] Ex. 7  
**Subject:** Verify

Hi Lynn, hi Jim,

Happy new year.

I have a question about the IUPV data input into Verify:

For test groups that we don't have to test in Low Mileage because of the Small Manufacturer Exemption, do we have to submit any information about the exemption?

I don't see anything where I can submit that in Verify.

Thanks for your help!

## Ex. 7

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone:

Cell:

Fax:

E-Mail:

## Ex. 7

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 11/26/2014 5:29:53 PM  
**Subject:** RE: [Ex.7]

Hi, Tobias.

I just got your email. I was out yesterday. I apologize if Jim has already gotten back to you.

I have not heard of any specific evap issues. I'd suggest contacting the Verify Help Desk at 1-888-890-1995 or verifyhelp@csc.com. They are usually the first line of contact when there are Verify issues.

Have a great Thanksgiving.

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Tuesday, November 25, 2014 1:54 PM  
**To:** Snyder..Jim; Sohacki, Lynn  
**Subject:** [Ex. 7]

Hi Lynn, hi Jim,

I tried to submit the IUVP data for a Diesel car and got a rejection because of some EVAP related stuff.

I don't really understand what the problem is, may be you can shine some light on that?

Thank you

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 10/8/2014 8:28:12 PM  
**Subject:** FW: Question about where TG CVWXV02.5259 are sold

Hi, Tobias.

I just wondered if you got my email from Monday.

Regards,

Lynn

**From:** Sohacki, Lynn  
**Sent:** Monday, October 06, 2014 12:55 PM  
**To:** Glas, Tobias  
**Subject:** Question about where TG CVWXV02.5259 are sold

Hi, Tobias.

I was thinking about selecting this test group for an in-use class. Unfortunately, we could not find any around here using the VIN identifiers. Were these sold in MI? If they were sold here, would you please let me know the VIN identifiers?

Thanks,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Mon 9/22/2014 1:34:59 PM  
**Subject:** RE: Test results for [redacted] **Ex. 7**

Good morning, Tobias.

I think it would be best to talk to your EPA certification rep, Jim Snyder. The reps usually go over IUPV testing plans with the manufacturers. Jim's number is 734-214-4946.

Regards,

Lynn Sohacki

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Friday, September 19, 2014 2:55 PM  
**To:** Sohacki, Lynn  
**Subject:** RE: Test results for T132RXX-0062

Hi Lynn,

I go through the regulation right now and have a few questions about the procurement and the number of cars that need to be tested for High Mileage / High Altitude.

Who is the best person at EPA to contact for an answer?

Have a nice weekend !

Tobias Glas

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, September 16, 2014 12:36 PM  
**To:** Glas, Tobias  
**Subject:** RE: [REDACTED] Ex. 7

Hi, Tobias.

Yes, the cold cell is up and running. I try to have at least one Cold CO test done per class.

We are not planning on testing any more vehicles in this class.

There are no VWs, Audis, Porsches or Bentleys included in the next stage of coast down testing.

Thanks for your help with this class.

Lynn

**From:** Glas, Tobias [<mailto:Tobias.Glas@vw.com>]  
**Sent:** Tuesday, September 16, 2014 11:30 AM  
**To:** Sohacki, Lynn; Snyder, Jim  
**Subject:** RE: Test results

**Ex. 7**

Hi Lynn,

Thank you for the results. I see you have the Cold chamber up and running. ☺

Please let me know if you plan on testing any more cars for that test group or if Surveillance testing is finished.

Last time I was at EPA I heard that there is another round of coastdown testing going on. Can you give me a heads up if there will be any VW, Audi, Porsche or Bentleys be part of the program?

Thank you very much

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, September 16, 2014 10:37 AM  
**To:** Glas, Tobias  
**Subject:** Test results for  Ex. 7

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki

Environmental Engineer

Compliance Division

EPA

734-214-4851



**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 9/16/2014 2:36:47 PM  
**Subject:** Test results for T132RXX-0062  
T132RXX-0062.pdf  
T132-0062 cold co.pdf

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki  
Environmental Engineer  
Compliance Division  
EPA  
734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Tue 8/26/2014 6:10:48 PM  
**Subject:** Parameters needed for

**Ex. 7**

**Ex. 7**

Hi, Tobias.

The following vehicle will be brought in next week:

**Ex. 7**

(Tuesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 8/13/2014 7:06:08 PM  
**Subject:** Test data for [redacted] **Ex. 7**

[redacted] **Ex. 7**

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki

Environmental Engineer

Compliance Division

EPA

734-214-4851

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Mon 7/28/2014 1:50:06 PM  
**Subject:** RE: Notification of a new in-use class T132

Thanks for the notice, Tobias. We will schedule around your trip.

Have a good week!

Lynn

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Monday, July 28, 2014 9:21 AM  
**To:** Sohacki, Lynn  
**Cc:** Snyder, Jim  
**Subject:** RE: Notification of a new in-use class T132

Hi Lynn !

Our mechanic and myself will be in Denver for the IUPV High altitude testing from August 4<sup>th</sup> to 16<sup>th</sup>.

Please schedule the Surveillance program around because we will not be able to check a car during that time.

Thank you

**Tobias Glas**

In-Use Emission Compliance Specialist



Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [<mailto:sohacki.lynn@epa.gov>]

**Sent:** Tuesday, July 15, 2014 4:55 PM

**To:** Glas, Tobias

**Subject:** Notification of a new in-use class T132

Hi, Tobias.

This is a notification of an upcoming in-use class. Normally, I send an email like this out when a notification letter is sent to a manufacturer to announce an in-use class. However, due to a support staff mix-up, the letter wasn't sent last month when I drafted it. It is being edited and will be sent tomorrow.

Unfortunately, the procurement process has proceeded independently of the letter and we have one of the vehicles scheduled to be procured next week.

I apologize for the late notice of both the in-use class and the notification of the procurement of this vehicle. I am attaching to this email a draft version of the notification letter. A final version

will be mailed to Dennis and emailed to you. Because it has been so long, would you please confirm the mailing address?

The vehicle being brought in next week is:

**Ex. 7**

(Wednesday) 0730 Vehicle

Pick up\_

Please fill out the attached parameter sheet and return it to me.

Our contractor, Jacobs, will be contacting you to schedule the maintenance. We have some flexibility in scheduling the maintenance of the vehicle. I hope that we can find something to accommodate your schedule. If not, please call me and I'll see what I can do.

Again, I apologize for the confusion. Please call me if you have any questions.

Thank you,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Sohacki, Lynn  
**Sent:** Wed 7/16/2014 8:05:50 PM  
**Subject:** Parameters for a second vehicle being brought in next week  
parameters form cold CO and US06 CO.xlsx

Hi, Tobias.

The following vehicle will be brought in next week:

**Ex. 7**

Tuesday) vehicle pick up @

0915.

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

I told Jacobs, our contractor, that Thursday would probably be a better day to oversee the maintenances so, hopefully, they will be able to schedule both on Thursday. You will be contacted by them soon to confirm your availability.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851



**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Thur 1/22/2015 7:43:50 PM  
**Subject:** RE: Verify

Thank you Lynn,

I will look into that topic.

Best regards

**Ex. 7**

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone:

Cell:

Fax:

E-Mail:

**Ex. 7**

**From:** Sohacki, Lynn [mailto:sohacki.lynn@epa.gov]

**Sent:** Wednesday, January 21, 2015 4:04 PM  
**To:**  Ex. 7  
**Cc:** Snyder, Jim  
**Subject:** RE: Verify

Hi,  Ex. 7

The regulations require a plan that is usually submitted with the cert preview document at the cert preview meeting. Since the plan was not developed before the cert preview meeting, it would be best for VW to submit to the Verify document module the IUPV plan which indicates the test groups that are subject to the small manufacturer exemption.

If possible, this new information should be added to the certification preview document and saved as “updated preview document” or “certification preview document with IUPV information.”

I hope this answers your question. Please contact me if you need more information.

Thanks,

Lynn

**From:**  Ex. 7  
**Sent:** Tuesday, January 13, 2015 5:52 PM  
**To:** Sohacki, Lynn; Snyder, Jim  
**Cc:**  Ex. 7  
**Subject:** Verify

Hi Lynn, hi Jim,

Happy new year.

I have a question about the IUPV data input into Verify:

For test groups that we don't have to test in Low Mileage because of the Small Manufacturer Exemption, do we have to submit any information about the exemption?

I don't see anything where I can submit that in Verify.

Thanks for your help!

## Ex. 7

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone:

Cell:

Fax:

E-Mail:

## Ex. 7

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Thur 10/16/2014 3:25:36 PM  
**Subject:** RE: Notification of EPA In-use class

Ex. 7

Hi Lynn,

Thanks for the update. Let us know when you have cars come in.

Thank you

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Thursday, October 16, 2014 5:19 PM

**To:** Glas, Tobias  
**Subject:** Notification of EPA In-use class

**Ex. 7**

Hi, Tobias.

I recently sent a letter to your company as notification of an upcoming in-use class. Attached, please find a copy of that letter for your convenience. Let me know if you have any questions.

Thank you,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Wed 10/8/2014 8:44:30 PM  
**Subject:** RE: Question about where [Ex. 7] are sold

Hi Lynn,

It is a PZEV / Bin 3 test group but there is a good chance most of the cars were sold in CA.

**Engine Type - VIN Character '5'**

Code B

GAS (50-St.)

5 - BIN 3 / PZEV

2480 cc / 151 cid

170

VW

**Ex. 7**

Is that what you are looking for ? The 5 th character should be a B.

Let me know if you need any more information.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Wednesday, October 08, 2014 1:28 PM  
**To:** Glas, Tobias  
**Subject:** FW: Question about where

**Ex. 7**

are sold

Hi, Tobias.

I just wondered if you got my email from Monday.

Regards,

Lynn

**From:** Sohacki, Lynn  
**Sent:** Monday, October 06, 2014 12:55 PM  
**To:** Glas, Tobias  
**Subject:** Question about where [redacted] Ex. 7 [redacted] are sold

Hi, Tobias.

I was thinking about selecting this test group for an in-use class. Unfortunately, we could not find any around here using the VIN identifiers. Were these sold in MI? If they were sold here, would you please let me know the VIN identifiers?

Thanks,

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Fri 9/19/2014 6:55:01 PM  
**Subject:** RE: Test results

**Ex. 7**

Hi Lynn,

I go through the regulation right now and have a few questions about the procurement and the number of cars that need to be tested for High Mileage / High Altitude.

Who is the best person at EPA to contact for an answer?

Have a nice weekend !

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, September 16, 2014 12:36 PM  
**To:** Glas, Tobias  
**Subject:** RE: Test results for

**Ex. 7**

Hi, Tobias.

Yes, the cold cell is up and running. I try to have at least one Cold CO test done per class.

We are not planning on testing any more vehicles in this class.

There are no VWs, Audis, Porsches or Bentleys included in the next stage of coast down testing.

Thanks for your help with this class.

Lynn

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Tuesday, September 16, 2014 11:30 AM  
**To:** Sohacki, Lynn; Snyder, Jim  
**Subject:** RE: Test results for

**Ex. 7**

Hi Lynn,

Thank you for the results. I see you have the Cold chamber up and running. ☺

Please let me know if you plan on testing any more cars for that test group or if Surveillance testing is finished.

Last time I was at EPA I heard that there is another round of coastdown testing going on. Can you give me a heads up if there will be any VW, Audi, Porsche or Bentleys be part of the program?

Thank you very much

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

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Auburn Hills, MI 48326

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Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Tuesday, September 16, 2014 10:37 AM  
**To:** Glas, Tobias

**Subject:** Test results fo

# Ex. 7

Hi, Tobias.

Test data for the above vehicle is attached. Please let me know if you have any questions.

Regards,

Lynn Sohacki

Environmental Engineer

Compliance Division

EPA

734-214-4851

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Tue 8/26/2014 6:12:06 PM  
**Subject:** Automatic reply: Parameters needed for

**Ex. 7**

Back in the office on Wednesday 3rd of September.

Tobias Glas

**To:** Garrison, Bruce[garrison.bruce@epa.gov]; Maury, Mark[maury.mark@epa.gov]; Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Thur 7/24/2014 1:12:21 PM  
**Subject:** Test data

## Ex. 7

Hi everybody,

Here is the information for the two Surveillance cars. If you need anything else don't hesitate to contact me.

Convertible

## Ex. 7

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Tue 7/15/2014 8:56:05 PM  
**Subject:** Automatic reply: Notification of a new in-use class

Ex. 7

I'm on a business trip to Germany. Expect delayed email response.

Tobias Glas

**To:** Sohacki, Lynn[sohacki.lynn@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Tue 1/14/2014 4:54:03 PM  
**Subject:** RE: Question about VW CC Class S146, test group

**Ex. 7**

Happy New Year Lynn !

I checked the different software levels and there is no emission related campaign for any of them.

So the car should be fine for testing.

Please keep me updated on further steps.

Thanks

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

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Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]  
**Sent:** Thursday, December 12, 2013 3:58 PM  
**To:** Glas, Tobias  
**Subject:** Question about VW CC Class S146, test group

**Ex. 7**

Hi, Tobias.

We are planning to start recruiting vehicles for this class even though it has been a long time since I sent the notification letter. One potential vehicle has had a computer reflash or update. I looked through the defect reports to see if there were any recalls or service actions on this test group for emissions purposes but couldn't locate anything. Have there been any emissions-related service campaigns for this test group?

Thanks in advance for your response.

**Lynn Sohacki**

Compliance Division

Environmental Protection Agency

734-214-4851

734-214-4869 fax

**To:** Glas, Tobias[Tobias.Glas@vw.com]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Pidgeon, Bill  
**Sent:** Mon 5/11/2015 9:04:13 PM  
**Subject:** RE: My 09 High Mileage

Hi Tobias,

We are thinking that you may have tried to enter the vehicle information again, for a vehicle that already has the same VIN. If so, try "correcting" the information to the latest information. For example change the mileage category from "High" to 75% Useful Life.

Please let me know if that works.

Best wishes,

Bill

\*\*\*\*\*

William M. Pidgeon  
Mechanical Engineer  
U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive  
Ann Arbor, MI 48105-2195  
pidgeon.bill@epa.gov

Phone: 734-214-4416  
Fax: 734-214-4869

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Wednesday, May 06, 2015 11:16 AM  
**To:** Pidgeon, Bill; Snyder, Jim  
**Subject:** My 09 High Mileage

Hi Bill, hi Jim,

I just submitted a My 09 High Mileage car.

The car was submitted first with 83K miles last year and now I submitted it now with 105K miles.

We didn't find any other car with 105K and I think it is fair game because we have over 20K miles between the test, so better test this than no car.

Of course CDX didn't accept the same VIN but accepted the test results, see attachment.

Please let me know if I should change something or if that is ok because all results should be in the system.

Best regards

**Tobias Glas**

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Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Glas, Tobias[Tobias.Glas@vw.com]  
**From:** Pidgeon, Bill  
**Sent:** Mon 5/11/2015 12:21:20 PM  
**Subject:** RE: Wednesday Meeting

Hi Tobias,

I opened the database for MY13 low mileage vehicles through Wednesday, 5/13/15. If Verify still rejects the vehicle, please contact the Verify Help Desk.

Best wishes,

Bill

\*\*\*\*\*

William M. Pidgeon  
Mechanical Engineer  
U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive  
Ann Arbor, MI 48105-2195  
pidgeon.bill@epa.gov

Phone: 734-214-4416  
Fax: 734-214-4869

**From:** Glas, Tobias [mailto:Tobias.Glas@vw.com]  
**Sent:** Wednesday, May 06, 2015 2:01 PM  
**To:** Pidgeon, Bill  
**Subject:** RE: Wednesday Meeting

Hi Bill,

**The car was rejected because of the time range. DO you know why?**

**Vehicle Process Code : C**  
**EPA Manufacturer Code : VWX**  
**Vehicle Identification Number Text : 3Vwdx7AJ4DM360546**  
**Emission Program Identifier : IUVE**  
**Test Group Name : DVWXV02.5U3A**  
**Evaporative Refueling Family Name : DVWXR0110238**  
**Model Year : 2013**  
**Engine Displacement Value : 2.48**  
**Manufacturer Division Code : 1**  
**Carline Code : 221**  
**Division Make Name : VW**  
**Carline Name : Jetta**  
**Trim Level Text : Jetta**  
**Vehicle Model Name : Jetta**  
**Vehicle Procured Sales Area Identifier : FA**  
**Vehicle Procured State Identifier : MI**  
**Vehicle Procured Altitude Indicator : L**  
**Vehicle Procured Climate Indicator : C**  
**Mileage Category Indicator : L**  
**Seventy Five Percent Useful Life Indicator : N**  
**Odometer Start Value : 45218**  
**Transmission Type Identifier : A**  
**Transmission Lockup Indicator : N**  
**Transmission Creeper Gear Indicator : N**  
**Transmission Gear Count : 6**  
**Tire Size Text : 205/55 R16**  
**Axle Ratio Value : 3.5**  
**Engine Code Text : CBTA**  
**Equivalent Test Weight Value : 3500**  
**Vehicle Inspection Date : 20150204**  
**Vehicle Built Date : 20120727**  
**Visual Malfunction Light Indicator : N**  
**Commanded Malfunction Light Indicator : N**  
**Active Trouble Code Indicator : N**  
**Readiness Status Complete Indicator : Y**  
**Mileage SinceOBD Leak Check Measure : 1**  
**Vehicle Rejection Code : 0**  
**Air Aspiration Method Identifier : NA**  
**In Use Test Drive Code : 3**  
**Vehicle Comment Text : Leak check = 1 work around according to Verify Help Desk  
Car has 55K miles but is supposed to be Low Mileage. We did not receive response for  
a real Low Mileage car so we tested this car and submitted it as Low Mileage with Low  
Mileage Standards, which are passed.**

## Transaction Status Details

**Transaction Status Identifier : REJECTED**

**Transaction Message Text :** IV-BR24 - IUPV Vehicle Information can only be accepted within the allowed time range of submissions for the Model Year (IV-8) and Mileage Category (IV-20).

**From:** Pidgeon, Bill [<mailto:pidgeon.bill@epa.gov>]  
**Sent:** Tuesday, May 05, 2015 8:36 AM  
**To:** Glas, Tobias  
**Subject:** RE: Wednesday Meeting

Hi Tobias – they are open through Fri.

Best wishes,

Bill

\*\*\*\*\*

William M. Pidgeon  
Mechanical Engineer  
U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive  
Ann Arbor, MI 48105-2195  
[pidgeon.bill@epa.gov](mailto:pidgeon.bill@epa.gov)

Phone: 734-214-4416  
Fax: 734-214-4869

**From:** Glas, Tobias [<mailto:Tobias.Glas@vw.com>]  
**Sent:** Tuesday, May 05, 2015 7:48 AM  
**To:** Pidgeon, Bill  
**Subject:** FW: Wednesday Meeting

Hi Bill,

As mentioned last week I still have 3 cars to submit. Can you please open CDX this week Wednesday through Friday?

Thank you

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

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Auburn Hills, MI 48326

United States of America

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Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**To:** Christi Poirier[Poirier.Christi@epa.gov]; Daniel Doku  
(ddoku@maseratiusa.com)[ddoku@maseratiusa.com]; Dave Smolarek[dave.smolarek@fcagroup.com];  
David Robertson (DRobertson@mazdausa.com)[DRobertson@mazdausa.com]; Dennis  
Pawlak[Dennis.Pawlak@na.mitsubishi-motors.com]; Douglas Reid[Douglas.Reid@na.mitsubishi-  
motors.com]; Farrukh Khan (KhanF@NRD.NISSAN-USA.COM)[KhanF@NRD.NISSAN-USA.COM];  
Frank Carollo (FCarollo@hatci.com)[FCarollo@hatci.com]; George Hall  
(ghall12@jaguarlandrover.com)[ghall12@jaguarlandrover.com]; Ian Cawdron  
(ICawdron@lotuscars.com)[ICawdron@lotuscars.com]; John H. Rugge Jr.  
(jrug@subaru.com)[jrug@subaru.com]; [REDACTED] Ex. 7 [REDACTED]@arb.ca.gov]; Ken J.  
Reed[ken.reed@volvocars.com]; Kim Williams  
(kimberly.williams@fcagroup.com)[kimberly.williams@fcagroup.com]; Lynn  
Byers[lynn.byers@fcagroup.com]; Mark Kabetis M. (mkabetis@ford.com)[mkabetis@ford.com]; Mark M.  
Poll (mpoll1@ford.com)[mpoll1@ford.com]; Matt J. White[matt.j.white@daimler.com]; Naoyasu Okawa  
(nokawa@mazdausa.com)[nokawa@mazdausa.com]; Nathan Hinderer[nathan.hinderer@daimler.com];  
Peace O. Uwague[Peace.OUwague@bmwnaext.com]; Randall C. Harvey[randall.c.harvey@gm.com];  
Robert Alsip[Robert.Alsip@suz.com]; Ross Gatzke[Ross.Gatzke@porsche.us]; Thomas A.  
Beierschmitt[tom.beierschmitt@tema.toyota.com]; Tobias Glas[Tobias.Glas@VW.com]; Tommy  
Chang[Tommy\_Chang@ahm.honda.com]  
**Cc:** Bill Pidgeon[Pidgeon.Bill@epa.gov]; David A. Wright[Wright.DavidA@epa.gov]; David  
Good[Good.David@epa.gov]; Jim Snyder[Snyder.Jim@epa.gov]; Joel  
Ball[/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=92af2ab6f5274bc597249d04358ef25f-Ball, Joel]; Joel  
Dalton[Dalton.Joel@epa.gov]; Lynn Sohacki[/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=ef46b8bb626b4d839372e708c5e1c0e9-Sohacki, Lynn];  
Michael Sabourin[/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=681363a36d704fa1b3a27b41a628231f-Sabourin, Michael];  
Tom Anderson[/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=34a82246d5d548a1bb4e9d017aea925d-Anderson, Tom];  
Wehrly, Linc[wehrly.linc@epa.gov]; William Ott[/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=2e336c9b18744fe7aedff42ebd445c41-Ott, William]; Verify Help  
Desk[verifyhelp@csc.com]  
**From:** Pidgeon, Bill  
**Sent:** Fri 1/16/2015 8:43:46 PM  
**Subject:** Quarterly Reporting Of The 2014 Q4 IUPV Tests Deadline Extended to February 14, 2015

To Manufacturer IUPV Representatives,

Mark Poll asked if the quarterly reporting of the 2014 Q4 IUPV tests can follow the same revised deadline used for 2013MY data (February 14, 2015) rather than the standard quarterly reporting deadline of January 30, 2015.

This is a good idea, and the answer is yes. Due to the Verify problem, the reporting deadline for 2014 Q4 IUPV tests is also extended to February 14, 2015.

Best wishes,

Bill

\*\*\*\*\*

William M. Pidgeon  
Mechanical Engineer  
U.S. Environmental Protection Agency  
Compliance Division, N69  
2000 Traverwood Drive  
Ann Arbor, MI 48105-2195  
[pidgeon.bill@epa.gov](mailto:pidgeon.bill@epa.gov)

Phone: 734-214-4416  
Fax: 734-214-4869

From: [REDACTED] **Ex. 7**  
Location: Conf Call  
Importance: Normal  
Subject: CARB-EPA-VW Diesel Conf Call  
Start Date/Time: Thur 9/17/2015 5:00:00 PM  
End Date/Time: Thur 9/17/2015 7:00:00 PM

.....

Good Morning,

Please see below for dial-in information. Conf ID is at the bottom.

Thanks

[REDACTED] **Ex. 7** [REDACTED]

EPA:

Byron Bunker

Linc Wehrly

Jim Snyder

CARB:

**Ex. 7**

Join Skype Meeting

This is an online meeting for Skype for Business, the professional meetings and communications app

formerly known as Lync.

## Join by phone

**Ex. 7**

(Auburn Hills) English (United States)  
(Auburn Hills) English (United States)  
(Auburn Hills) English (United States)  
(Auburn Hills) English (United States)

[Find a local number](#)

Conference ID:  Non-Responsive

[Forgot your dial-in PIN?](#) | [Help](#)

**To:** Wehrly, Linc[wehrly.linc@epa.gov]  
**Cc:** [redacted] Ex. 7  
**From:** [redacted] Ex. 7  
**Sent:** Wed, 7/15/2015, 12:40:01 PM  
**Subject:** RE: [redacted] **Ex. 4 - CBI**

**Ex. 4 - CBI**

No problem, please see attached. Thanks again for the discussion.

**From:** Wehrly, Linc [mailto:wehrly.linc@epa.gov]  
**Sent:** Tuesday, July 14, 2015 4:25 PM  
**To:** Tamborra, Nick (EEO)  
**Subject:** **Ex. 4 - CBI**

Nick,

Could you please send me an electronic version of the presentation you shared with me last Friday?

Thanks,

Linc

Linc Wehrly

Director, Light-Duty Vehicle Center

Compliance Division

Office of Transportation and Air Quality

United States Environmental Protection Agency

(734) 214-4286

[wehrly.linc@epa.gov](mailto:wehrly.linc@epa.gov)



**To:** Wehrly, Linc[wehrly.linc@epa.gov]; French, Roberts[french.roberts@epa.gov]  
**Cc:** [redacted] Ex. 7  
Ex. 7 [redacted] @vw.com  
**From:** [redacted] Ex. 7  
**Sent:** Wed 6/10/2015 4:53:41 PM  
**Subject:** RE: VW Group Off-Cycle Concepts Review

Hi Linc,

Thanks for getting back. Let's go ahead and look at week 26 (week after next). That will give us some more time to work out schedules.

I will forward a meeting invite by email, just go ahead and send back any alternatives if the time doesn't work.

Thanks again and we look forward to discussing these technologies.

[redacted] Ex. 7 [redacted]

**From:** Wehrly, Linc [mailto:wehrly.linc@epa.gov]  
**Sent:** Tuesday, June 09, 2015 4:14 PM  
**To:** [redacted] Ex. 7 French, Roberts  
**Cc:** [redacted] Ex. 7  
**Subject:** RE: VW Group Off-Cycle Concepts Review

[redacted] Ex. 7 [redacted]

Next week would be fine, but I will out Thursday and Friday, so it will have to be before that. Let me know if you are available or whether you want to wait another week.

Regards,

Linc

Linc Wehrly

Director, Light-Duty Vehicle Center

Compliance Division

Office of Transportation and Air Quality

United States Environmental Protection Agency

(734) 214-4286

[wehrly.linc@epa.gov](mailto:wehrly.linc@epa.gov)

**From:** [redacted] **Ex. 7** [redacted] @vw.com]

**Sent:** Tuesday, June 09, 2015 9:21 AM

**To:** Wehrly, Linc; French, Roberts

**Cc:** [redacted] **Ex. 7** [redacted]

**Subject:** VW Group Off-Cycle Concepts Review

Hi Linc, Rob,

Various departments throughout our organization have been approaching us with concepts for advanced technologies which may deliver off-cycle benefits for GHG. [redacted] **Ex. 4 - CBI**

## **Ex. 4 - CBI**

We would like to set-up a brief introductory review of the technologies with you both just to get [redacted] **Ex. 4 - CBI** [redacted]. Our goal is to be able to give some initial feedback to the various development departments so they can better formulate a proof of concept plan moving forward.

Nothing formal, just a few slides on each concept. Could we look at scheduling an hour sometime for later next week? Probably just Len, Stuart, and myself from our side. At this point, we have five concepts being discussed.

Thanks,

**Ex. 7**

**Ex. 7**

Engineering and Environmental Office

**Ex. 7**

**To:** Andrew Kosiak[AKosiak@tuthill.com]; Atit Amin[atit.amin@exxonmobil.com]; Brendan Foster[brendan@benecor.net]; C Moughlor[camoughlor@ashland.com]; Dean, Clifford[Dean.Clifford@epa.gov]; D Wyeany[dwyeany@ashland.com]; David Kayes[davidkayes@freightline.com]; David Shaw[dshaw@cleanemissionfluids.com]; Dennis Smith[dennis.a.smith@ee.doe.gov]; F Lockwood[IMCEAEX-O=AUTO+20ALLIANCE\_OU=AAM\_cn=Recipients\_cn=FLockwood@autoalliance.org]; Frank Rutten[Frank.Rutten@shell.com]; G Croce[GCroce@chevron.com]; Greg McAfee[greg.mcafee@chsinc.com]; Hauke Braack[hauke.braack@exxonmobil.com]; I [REDACTED] Ex. 6 J Barr[jbarr@ryder.com]; J Fellman[jfellman@nacsonline.com]; J Schecki[jschecki@emamail.org]; Jackie Yeager[jackie.m.yeager@cummins.com]; jsong@meca.org[jsong@meca.org]; Karl Tasik[karl.tasik@volvo.com]; Ken Howden[ken.howden@ee.doe.gov]; [REDACTED] Ex. 6 Lance Tunick[tunick@vsci.net]; Larry Northup[larry.northup@aftermarket.org]; Wehrly, Linc[wehrly.linc@epa.gov]; M Buczek[mbuczek@venturepointresearch.com]; Marcel de Kort[marceldekort@greenchem-adblue.com]; Mark Busch[mbusch@cleanemissionfluids.com]; [REDACTED] Ex. 6 Oliver Baer[obaer@cleanemissionfluids.com]; [REDACTED] Ex. 6 Patrick Kelly[kellyp@api.org]; Patrik Klintbom[patrik.klintbom@volvo.com]; Röbert Fasnacht[robert.fasnacht@volvo.com]; Robert Jorgensen[robert.a.jorgensen@cummins.com]; Robert M. Clarke[robertmclarke@truckmfgs.org]; Robert Rupert[robert.rupert@dot.gov]; Rosemary Perry[rosemary.perry@aftermarket.org]; Ross Johnson[Ross.Johnson@yara.com]; Ryan Carroll[ryan.carroll@aftermarket.org]; Steve Berry[steve.berry@volvo.com]; T Columbus[tcolumbus@steptoe.com]; Taylor Davis[davistaylor@johndeere.com]; Goff\_Terry\_A@cat.com[Goff\_Terry\_A@cat.com]; Uzel Memed[memed.uzel@volvo.com]; Vic Meloche[vic.meloche@detroitdiesel.com]; Warren Kotacska[wkotacska@colonial-chemical.com]; Yuri Kalish[yuri.kalish@detroitdiesel.com]; Zafar Shaikh[fshaikh@ford.com]; ldc@cervantes-delgado.com[ldc@cervantes-delgado.com]; 'Lonsdale, Barry'[BLonsdale@terraindustries.com]; 'Groeneveld, Michel'[michel.groeneveld@dureal.com]; D Gilligan[dgilligan@pmaa.org]; 'KAYLC@kochind.com'[KAYLC@kochind.com]; 'Brottd-Giles, Debbie'[Debbie\_Brottd\_Giles@nrel.gov]; 'Claassen, Matt'[CLAASSEM@kochind.com]; 'Mark S. Morgan, Esq.'[mmorganpts@cox.net]; 'Christopher Pett'[Christopher.Pett@integer-research.com]; 'Johnson Joy'[joy.johnson@volvo.com]; rbrezny@meca.org[rbrezny@meca.org]; 'Brandon Wright'[bwright@pmaa.org]; 'robert.aman@skf.com'[robert.aman@skf.com]; 'shauncmmsusa@nycap.rr.com'[shauncmmsusa@nycap.rr.com]; Friedrich Krahn[friedrich.krahn@daimler.com]; 'thomas.troeger@rehau.com'[thomas.troeger@rehau.com]; 'manoj.tummala@gm.com'[manoj.tummala@gm.com]; Peavyhouse, Robert[Peavyhouse.Robert@epa.gov]; 'toshiya.shiozawa@hino.co.jp'[toshiya.shiozawa@hino.co.jp]; 'kato@hino.com'[kato@hino.com]; 'daniels@hino.com'[daniels@hino.com]; 'bachelder@api.org'[bachelder@api.org]; 'gsgutowski@aaamichigan.com'[gsgutowski@aaamichigan.com]; 'r.boeker@alumag.de'[r.boeker@alumag.de]; [REDACTED] Ex. 6 rsompel@cfindustries.com[rsompel@cfindustries.com]; saverio.verduci@gm.com[saverio.verduci@gm.com]; erich@thebeckercompanies.com[erich@thebeckercompanies.com]; brent.calcut@detroitdiesel.com[brent.calcut@detroitdiesel.com]; halfano@natso.com[halfano@natso.com]; r.modlin@chrysler.com[r.modlin@chrysler.com]; Steve Mazure[srm2@chrysler.com]; Klaus Land[klaus.land@daimler.com]; 'dbilby@cfindustries.com'[dbilby@cfindustries.com]; 'shawn.whitacre@cummins.com'[shawn.whitacre@cummins.com]; 'mansour.masoudi@us.bosch.com'[mansour.masoudi@us.bosch.com]; 'andyarendt@chsinc.com'[andyarendt@chsinc.com]; 'mikedelaney@freightliner.com'[mikedelaney@freightliner.com]; 'adiamond@cfindustries.com'[adiamond@cfindustries.com]; 'kdoran@quixotegroup.com'[kdoran@quixotegroup.com]; 'kingsley.maunder@integer-research.com'[kingsley.maunder@integer-research.com]; Mike Zammit[mz10@chrysler.com]; 'alistair.wallace@integer-research.com'[alistair.wallace@integer-research.com]; 'akl@airbluefluids.com'[akl@airbluefluids.com]; 'otis.clay@agcocorp.com'[otis.clay@agcocorp.com];

'LWitek@brenntag.com'[LWitek@brenntag.com]; 'tim.cheyne@integer-research.com'[tim.cheyne@integer-research.com]; 'steven.yarosz@isza.com'[steven.yarosz@isza.com]; Jeff Marsee[Jeff.Marsee@isza.com]; 'shin.shirao@isza.com'[shin.shirao@isza.com]; 'dennis.feist@shell.com'[dennis.feist@shell.com]; Hubert Schnupke[hubert.schnuepke@daimler.com]; swrobinson@potashcorp.com[swrobinson@potashcorp.com]; 'thighfield@terrainindustries.com'[thighfield@terrainindustries.com]; 'ernst.olav.strutz@yara.com'[ernst.olav.strutz@yara.com]; Carlheinz Bayer[carlheinz.bayer@bmwna.com]; 'vsrinivasan@balcrank.com'[vsrinivasan@balcrank.com]; 'jack.fischbein@shell.com'[jack.fischbein@shell.com]; 'roger.cudini@shell.com'[roger.cudini@shell.com]; 'tblubaugh@emamail.org'[tblubaugh@emamail.org]; 'ntellam@ryder.com'[ntellam@ryder.com]; 'William Linden'[wjlinden@sentrelligence.com]; 'Novak, Brent'[NovakB@kochind.com]; 'Chandasir, Muhammad'[Muhammad.Chandasir@agcocorp.com]; 'aarmstrong@industrialsolutionservices.com'[aarmstrong@industrialsolutionservices.com]; 'brouthier@trucking.org'[brouthier@trucking.org]; 'charlie\_carr@andersonsinc.com'[charlie\_carr@andersonsinc.com]; 'wcherz@tfi.org'[wcherz@tfi.org]; William Craven[william.craven@daimler.com]; 'miguel.soetaert@detroitdiesel.com'[miguel.soetaert@detroitdiesel.com]; 'jbeumler@terrainindustries.com'[jbeumler@terrainindustries.com]; 'jaime.francis@cummins.com'[jaime.francis@cummins.com]; 'cac@airbluefluids.com'[cac@airbluefluids.com]; 'awd@cervantes-delgado.com'[awd@cervantes-delgado.com]; 'kevin.devinney@gilbarco.com'[kevin.devinney@gilbarco.com]; 'jfrend@steptoe.com'[jfrend@steptoe.com]; 'aharada@itepsa.com'[aharada@itepsa.com]; 'sariga@itepsa.com'[sariga@itepsa.com]; 'gkroon@agrium.com'[gkroon@agrium.com]; 'asmith@brenntag.com'[asmith@brenntag.com]; 'cmurphy@brenntag.com'[cmurphy@brenntag.com]; 'david.siler@detroitdiesel.com'[david.siler@detroitdiesel.com]; 'rakesh.aneja@detroitdiesel.com'[rakesh.aneja@detroitdiesel.com]; 'kent.robinson@dresser.com'[kent.robinson@dresser.com]; 'bcarter@excelda.com'[bcarter@excelda.com]; 'sue.m.clark@exxonmobil.com'[sue.m.clark@exxonmobil.com]; 'dpolak@ezfuel.com'[dpolak@ezfuel.com]; 'joseph.butler@flyingj.com'[joseph.butler@flyingj.com]; 'richard.peterson@flyingj.com'[richard.peterson@flyingj.com]; 'dgenheimer@quixotegroup.com'[dgenheimer@quixotegroup.com]; 'bagdasarian.ara@tatravelcenter.com'[bagdasarian.ara@tatravelcenter.com]; 'jameson.pat@tatravelcenters.com'[jameson.pat@tatravelcenters.com]; 'cburns@larsonco.com'[cburns@larsonco.com]; 'jeroen.schoonderbeek@yara.com'[jeroen.schoonderbeek@yara.com]; 'jboester@tuthill.com'[jboester@tuthill.com]; gerber\_gordon\_r@cat.com[gerber\_gordon\_r@cat.com]; 'Michele\_Calbi@swifttrans.com'[Michele\_Calbi@swifttrans.com]; 'Tracy Gahan'[tracy@caljet.com]; 'teundebrijn@greenchem-adblue.com'[teundebrijn@greenchem-adblue.com]; 'lee.mitchell@sscoop.com'[lee.mitchell@sscoop.com]; 'dsmith@terrainindustries.com'[dsmith@terrainindustries.com]; GKedzie@trucking.org[GKedzie@trucking.org]; robert.babik@gm.com[robert.babik@gm.com]; Teri Kowalski[teri.kowalski@tema.toyota.com]; Stuart Johnson[stuart.johnson@vw.com]; Simon, Karl[Simon.Karl@epa.gov]; Michael Potter[michael.a.potter@gm.com]; Walter Lewis[walter.lewis@porsche.us]; Greg Shank[greg.shank@volvo.com]; Larry Robertson[lar10@chrysler.com]; Roger Gault[rgault@emamail.org]; Richard Moskowitz[rmoskowitz@trucking.org]; Dale Kardos[dale.kardos@motorvehiclerregs.com]; Matthew Kevnick[matthew.kevnick@tema.toyota.com]; Eric Schneider[eric.a.schneider@mbusa.com]; Edward Cohen[Edward\_Cohen@hna.honda.com]; Barbara Nocera[bnocera@mazdausa.com]; Anna-Maria Schneider[anna.schneider@vw.com]; Alyssa Werthman[awerthma@ford.com]; aschaeffer@dieselforum.org[aschaeffer@dieselforum.org]; Christine Lambert[clamber9@ford.com]; Anita Rajan[anita.rajan@na.mitsubishi-motors.com]; jeichberger@nacsonline.com[jeichberger@nacsonline.com]; John Cabaniss[jcabaniss@aiam.org]; John Ruggel[rugge@subaru.com]; Ed Kulik[ekulik@ford.com]; Joseph Kaufman[joseph.w.kaufman@conocophillips.com]; Fred Sciance[fred.sciance@gm.com]; Ichiro Sakai[Ichiro\_Sakai@ahm.honda.com]; Gregory Scott[gscott@npra.org];

'jtipka@trucking.org'[jtipka@trucking.org]; 'Kevin Ferrick (API)'[IMCEAEX-O=AUTO+20ALLIANCE\_OU=AAM\_cn=Contact+20Management\_cn=Kevin+20Ferrick+20+28API+29@autoalliance.org]; Julie Becker[JBECKER@autoalliance.org]; Rochelle Neal[RNeal@autoalliance.org]; 'sbowling@piedmont-group.com'[sbowling@piedmont-group.com];

Ex. 6

[REDACTED] david.siler@daimler.com[david.siler@daimler.com];

'tom.braun@colder.com'[tom.braun@colder.com];  
'thomas.manley@fptpowertrain.com'[thomas.manley@fptpowertrain.com];  
'corbin.navis@kochind.com'[corbin.navis@kochind.com];  
'g.vasauskas@achema.com'[g.vasauskas@achema.com];  
'dcomp@pvschemicals.com'[dcomp@pvschemicals.com];  
'lori.rosenthal@cummins.com'[lori.rosenthal@cummins.com];  
'karin.nystrom@am.dynonobel.com'[karin.nystrom@am.dynonobel.com]; 'astrid.tsai@integer-research.com'[astrid.tsai@integer-research.com]; 'amy.woolmer@integer-research.com'[amy.woolmer@integer-research.com];  
'laura.a.weeks@cummins.com'[laura.a.weeks@cummins.com];  
'tom.glahn@wayne.com'[tom.glahn@wayne.com]; 'hank@bercotank.com'[hank@bercotank.com];  
'toshiyuki.masuda@daimler.com'[toshiyuki.masuda@daimler.com];  
'philk@mcchemical.com'[philk@mcchemical.com]; 'jpellerin@monsonco.com'[jpellerin@monsonco.com];  
'stigu@carbonalliance.com.au'[stigu@carbonalliance.com.au];  
'cwenzel@oldworldind.com'[cwenzel@oldworldind.com]; 'slopiano@scholle.com'[slopiano@scholle.com];  
'mostertag@shawdev.com'[mostertag@shawdev.com]; 'k.c.hall@cummins.com'[k.c.hall@cummins.com];  
dave.uschwald@integer-research.com[dave.uschwald@integer-research.com];  
kwiding@misco.com[kwiding@misco.com]; Susan Conti[sconti@autoalliance.org];  
joes@brenneroil.com[joes@brenneroil.com];  
gbohlender@ppclubricants.com[gbohlender@ppclubricants.com];  
mark.vaughan@kingspanenv.com[mark.vaughan@kingspanenv.com];  
apankey@ashland.com[apankey@ashland.com]; rrenkes@pei.org[rrenkes@pei.org];  
ticeT@api.org[ticeT@api.org]; jkubsh@meca.org[jkubsh@meca.org];  
ddixon@oechf.com[ddixon@oechf.com]; richard.browne@gilbarco.com[richard.browne@gilbarco.com];  
megan.brownell@aucterus.com[megan.brownell@aucterus.com];  
nancy.somers@gm.com[nancy.somers@gm.com]; r.hewko@krusena.com[r.hewko@krusena.com];  
paolo.dimartino@gm.com[paolo.dimartino@gm.com];  
noel@dieselexhaustfluid.com[noel@dieselexhaustfluid.com];  
edeaton@amalgatech.com[edeaton@amalgatech.com]; s.uhlen@aucterus.com[s.uhlen@aucterus.com];  
t.katchmark@aucterus.com[t.katchmark@aucterus.com];  
jlounsbury@cfindustries.com[jlounsbury@cfindustries.com]; bstotler@natso.com[bstotler@natso.com];  
mark@dieselexhaustfluid.com[mark@dieselexhaustfluid.com];  
owen@dieselexhaustfluid.com[owen@dieselexhaustfluid.com];  
fcook@oldworldind.com[fcook@oldworldind.com];  
Margaret.Sullivan@paccar.com[Margaret.Sullivan@paccar.com];  
harmeningj@api.org[harmeningj@api.org]; ppicarie@astm.org[ppicarie@astm.org];  
mharris@mitfuso.com[mharris@mitfuso.com]; bmohr@mitfuso.com[bmohr@mitfuso.com];  
drthomas@cfindustries.com[drthomas@cfindustries.com];  
shanemsweet@gmail.com[shanemsweet@gmail.com];  
mark.casarella@us.bosch.com[mark.casarella@us.bosch.com]; jss@micro-matic.com[jss@micro-matic.com]; matthew.jenkins@gilbarco.com[matthew.jenkins@gilbarco.com];  
cculverhouse@oldworldind.com[cculverhouse@oldworldind.com];  
nakia.l.simon@chrysler.com[nakia.l.simon@chrysler.com]; tscott@trucking.org[tscott@trucking.org];  
katiep@mcchemical.com[katiep@mcchemical.com];  
alberto.febre@piusiusa.com[alberto.febre@piusiusa.com];  
walter.bernoldi@piusiusa.com[walter.bernoldi@piusiusa.com];  
john.rogers@agcocorp.com[john.rogers@agcocorp.com]; mpa@micro-matic.com[mpa@micro-matic.com]; Koury, Joe (jkoury@astm.org)[jkoury@astm.org]; jgallagh@astm.org[jgallagh@astm.org];  
jjeffers@thekag.com[jjeffers@thekag.com];  
rgribik@cwmenvironmental.com[rgribik@cwmenvironmental.com];  
bridget.m.revier@cummins.com[bridget.m.revier@cummins.com];

sgarney@trucking.org[sgarney@trucking.org]; james.hobday@integer-research.com[james.hobday@integer-research.com];  
joe.franklin@intertek.com[joe.franklin@intertek.com]; rebecca.shellim@integer-research.com[rebecca.shellim@integer-research.com];  
lindenjim@jlindenconsulting.com[lindenjim@jlindenconsulting.com];  
matthew.psota@cummins.com[matthew.psota@cummins.com]; dd1@micro-matic.com[dd1@micro-matic.com]; srowe@semlerindustries.com[srowe@semlerindustries.com];  
rohan.murphy@vicfuels.com[rohan.murphy@vicfuels.com];  
stephen.kirby@navistar.com[stephen.kirby@navistar.com];  
hurd\_stephen\_s@cat.com[hurd\_stephen\_s@cat.com]; Neil Whitbeck[nwhitbec@ford.com]; Chris Nevers[CNevers@autoalliance.org]; { Ex. 6  
rons@acustrip.com[rons@acustrip.com]; dean.smith@ossmaine.com[dean.smith@ossmaine.com];  
eric.roy@ossmaine.com[eric.roy@ossmaine.com]

**From:** Giedrius Ambrozaitis  
**Sent:** Fri 1/3/2014 5:02:17 PM  
**Subject:** SCR Stakeholder Group -- Special ISO Comment Meeting January 7 - RSVP requested  
DEF TF Recommended Changes ISO 22241-1-2-3 20131230.xlsx  
AUS32 Shelflife Study 18 month report.pdf  
SCR Stakeholder Mtg Agenda January 7, 2014.doc

This is a reminder notice for a special meeting of the SCR Stakeholder Group to collect and condense comments to ISO on changes to Parts 1, 2 and 3 of ISO Standard 22241.

If you are planning to attend in person, please RSVP in advance to Jeff Harmening of API ([harmeningj@api.org](mailto:harmeningj@api.org)).

Attached are the collated, proposed recommendations out of the API DEF Task Force Group along with some data to support some of the recommendations.

\*\*\*\*\*

The meeting will be held on January 7 2014 at 12:00 noon eastern at the American Petroleum Institute (API) offices in Washington DC (1220 L Street, NW, Washington, DC 20005-4070). An agenda is attached.

The conference call number will be 1-866-443-0059 with code 2026828233# .

The US representative to ISO is Zafar Shaikh, the head of SAE (Society of Automotive Engineers) Exhaust Aftertreatment and Emissions Committee (and also a powertrain manager at Ford). Zafar has requested that any and all recommended changes to Parts 1, 2 and 3 of ISO 22241 be submitted to him by January 15<sup>th</sup>. He further strongly recommends that any recommendations for changes to the current standards be substantiated with data and reasoning to support them.

The API Task Force will be meeting on December 20<sup>th</sup> to discuss changes. These changes will be brought forward into the January 7 SCR Stakeholder Group meeting and onto Zafar Shaikh and ISO.

If you or your company has recommendations for changes, please be sure to bring those changes with substantiation to either of these upcoming meetings.

A meeting date for the next regular meeting of the SCR Stakeholder Group meeting will be circulated shortly.

=====

The SCR Stakeholder Group (formerly called the Urea Stakeholder Group) is made up of industries, organizations and companies interested in urea for mobile source applications.

Participants include:

- Government (US Department of Energy, EPA)
- Automotive and heavy-duty engine and truck manufacturer trade associations
- Fuel retailer and truck stop trade associations
- Oil companies
- Urea distributors
- Petroleum dispenser manufacturers and associations

The main objectives of the SCR Stakeholder Group are:

- To exchange information with US government and other potential urea stakeholders on the potential market and need for urea availability.
- To consider effective education and outreach to consumers and commercial concerns about urea, its use and availability.
- To engage potential providers of urea availability to determine the conditions necessary for provision of retail availability before a profitable market exists.

If you have any questions concerning the SCR Stakeholder Group or the meeting, please call me at (248) 915-8836.

Sincerely,

Giedrius Ambrozaitis  
Director, Environmental Affairs  
Alliance of Automobile Manufacturers  
Tel. (248) 915-8836  
email: [gambrozaitis@autoalliance.org](mailto:gambrozaitis@autoalliance.org)

**Agenda**  
**Special SCR Stakeholder Group Meeting**  
**January 7, 2014**

Location:

**American Petroleum Institute**  
1220 L Street, NW Washington, DC 20005-4070

Conference call number (for all meetings):

1-866-443-0059 with code 2026828233#

Agenda

**Lunch - 11:30 am Eastern**

**Special SCR Stakeholder Group Meeting (12:00 pm - 3:00 pm)**

1. Introduction/Roll Call/Antitrust	Harmening/Ferrick/Ambrozaitis	1 min
2. Recommended changes to Parts 1, 2 and 3 of ISO 22241  - Changes from Dec 20 API Task Force meeting - Other new changes - Collate changes in to document for Zafar Shaikh SAE for ISO - Next steps	Harmening/Thomas	3 hours

**Ex. 7**

**Location:** Skype Meeting  
**Importance:** Normal  
**Subject:** Diesel Discussion  
**Start Date/Time:** Fri 9/11/2015 5:00:00 PM  
**End Date/Time:** Fri 9/11/2015 6:30:00 PM

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**Join Skype Meeting**

This is an online meeting for Skype for Business, the professional meetings and communications app formerly known as Lync.

**Join by phone**

**Ex. 7**

Auburn Hills) English (United States)  
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Auburn Hills) English (United States)  
Auburn Hills) English (United States)

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Conference ID: [Non-Responsive](#)

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NON-DISPATCH

**To:** Snyder, Jim[Snyder.Jim@epa.gov]; Mazaitis, Vincent[mazaitis.vincent@epa.gov]  
**Cc:** Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Rodgers, William  
(EEO)[William.Rodgers@vw.com]; Horton, Garett (VWGoA Imp)[garett.horton@volkswagen.de]  
**From:** Giles, Michael (EEO)  
**Sent:** Mon 9/28/2015 8:13:19 PM  
**Subject:** VW Group: e-Tron prep / timing

Hi Jim / Vince,

Just wondering if there is a set time for the e-tron prep tomorrow. If we do not hear from you we will send someone there at 7:00

My understanding is you are planning at least a fuel change, and overnight charge for the CD test on Wednesday. What I am not sure of is, will there also be a UDDS cycle on the dyno?

Thanks,

Mike

Michael Giles

Certification Engineer

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4229

Fax: 248 754 4207

[mailto: Michael.Giles@VW.com](mailto:Michael.Giles@VW.com)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]

**Cc:**

Ex. 7

**Ex. 7**

**From:** Ex. 7

**Sent:** Fri 9/25/2015 8:34:12 PM

**Subject:** EPA Request for Certification - Audi A3 e-tron

Hi Jim,

I have submitted the Initial Application and Certification Request for the A3 e-tron and e-tron ultra PHEV models, Test Group GVGAV01.4V3B. This Certification request is based on manufacturer test data using Tier 3 E10 fuel already waived from confirmatory testing. As you are aware the fuel economy for the worst case EDV (configuration 0) using E0 fuel is currently being confirmed at your lab. Please let me know if there are any questions.

I will be updating the CSI in the application with battery specific energy values and comments regarding Litmus test status next week. The existing calculated litmus thresholds in the CSI are erroneous due to Verify not being able to calculate the values with E10 fuel.

Regards,

**Ex. 7**

**To:** Good, David[good.david@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Fri 9/25/2015 6:25:21 PM  
**Subject:** Audi A3 e-tron ultra  
[monroney\(18\) A3 e-tron ultra.pdf](#)

Hi Dave;

As your requested, attached is a sample of the fuel economy label for the 2106 Audi A3 e-tron ultra. Please let me now if you have any concerns and that all the required data has been properly displayed. The factory has told me that it is a non-blended PHEV, I believe this point was already pointed out to EPA in an A3 e-tron presentation in early August.

Best regards,

Richard

Richard E. Thomas

Senior Emission Certification Specialist  
Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

LOC:  
Exterior:

Dealer Stock Status:  
Interior:

VIN: 8VAPTEST01EN00002  
Interior:

MODEL: 8VAP5PX 2016 Audi A3 Sportback 1.4T FWD e-tron S tronic  
2015268-TEST LABEL

# 2016 Audi A3 Sportback 1.4T FWD e-tron S tronic

Truth in Engineering  


DRIVER'S SUGGESTED RETAIL PRICE	\$
Sportback 1.4T FWD e-tron S tronic	

)OPTIONS

\$

## STANDARD EQUIPMENT (unless replaced by options)

### TECHNICAL

- 1.4 TFSI®, 4 CYL., PHEV, 204hp / 256lb-ft, combined
- 6-speed S tronic transmission
- 17"-spoke-Y design wheels, 205/55 summer tires
- ESC (Electronic Stability Control) with secondary collision brake
- Disc brakes, ventilated front & solid rear discs
- ABS (Anti-lock brake system) with brake assist
- Electromechanical speed-sensitive power steering
- TPMS (tire pressure monitoring system)

### COMFORT/CONVENIENCE

- Panoramic sunroof w/ retractable sunshade
- Auto xenon plus headlights w/ LED DRLs & taillights
- Rain & light sensor
- Power-adjustable exterior mirrors
- 12-way power adjustable driver seat including lumbar adjustment
- Leather-heating surfaces
- Dual-zone automatic climate control
- 3-spoke leather-wrapped multifunction steering wheel
- Audi sound system
- AM/FM/SD/USB/CD audio w/ SD card reader & aux-in
- SIRIUS® satellite radio (w/ three-month complimentary subscription)
- Preparation for mobile phone (Bluetooth®)
- Driver information system
- Parking system plus with rearview camera
- Mobile charging unit
- Audi drive select
- LED interior lighting package

### SAFETY/SECURITY

- Driver and front passenger advanced airbag supplemental restraint system
- Driver and front passenger knee airbags
- Driver and front-passenger seat-mounted thorax side airbags
- Side- and head-curtain airbags
- Driver 3-point safety belts with Automatic Locking Retractor (ALR), Outboard 3-point safety belts with Automatic Locking Retractor (ALR), Front passenger 3-point safety belt with Automatic Locking Retractor (ALR), Rear center 3-point safety belt with Automatic Locking Retractor (ALR), Lower Anchors and Tensioners for Children (LATCH) in rear
- Rear child safety locks
- Anti-theft vehicle alarm system

### WARRANTY/Maintenance

4 years/50,000 miles whichever occurs first. New Vehicle limited warranty.

## EPA Fuel Economy

DOT

Method

DRPOF

Method

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Fri 9/25/2015 6:01:55 PM  
**Subject:** RE: A3 etron

Correction FTP, not US06 retest, as stated below.

[Ex. 7]

---

**From:** [REDACTED] Ex. 7  
**Sent:** Friday, September 25, 2015 9:24 AM  
**To:** "Jim Snyder" (Snyder.Jim@epamail.epa.gov)  
**Subject:** FW: A3 etron

Hi Jim,

Our discussion about dyno coefficient discrepancy has been resolved and your lab numbers look correct. We originally provided incorrect coefficients values for Verify input. I will correct these values in Verify.

A decision from our factory whether to request a retest of the US06 cycle is still pending. We should have more information on Monday.

Regards,

[Ex. 7]

Volkswagen Group  
3800 Hamlin Rd  
Auburn Hills, MI 48326  
p. [REDACTED] Ex. 7

---

**From:** [REDACTED] Ex. 7  
**Sent:** Friday, September 25, 2015 9:04 AM  
**To:** [REDACTED] Ex. 7  
**Cc:** [REDACTED] Ex. 7  
**Subject:** A3 etron Vehicle book typo

Good morning [REDACTED] Ex. 7

After a bit more analysis we have found the discrepancies between EPA/WOB dyno load adjustment. In the vehicle book the Dyno Set coefficients are actually for a Twin roll, not a single roll. Please see the correct values below and update verify if necessary.

16" Twin Roll -133,5/-0,247/0,0323

16" Single Rol -53,5/-0,247/0,0323

17" Twin Roll -108,3/-0,321/0,0355

17" Single  
Roll -28,3/-0,321/0,0355

The EPA Road Load appears to be fine when compared to the correct values, so no further discussion about Roadload is necessary:

<< OLE Object: Picture (Device Independent Bitmap) >>

Thanks for the help,

**Ex. 7**

Mit freundlichen Grüßen / Regards

**Ex. 7**

**Ex. 7**

Wichtiger Hinweis: Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail zu.

Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon VOLKSWAGEN AG.

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Fri 9/25/2015 1:23:33 PM  
**Subject:** FW: A3 etron

Hi Jim,

Our discussion about dyno coefficient discrepancy has been resolved and your lab numbers look correct. We originally provided incorrect coefficients values for Verify input. I will correct these values in Verify.

A decision from our factory whether to request a retest of the US06 cycle is still pending. We should have more information on Monday.

Regards,

[REDACTED]  
**Ex. 7**

Volkswagen Group  
3800 Hamlin Rd  
Auburn Hills, MI 48326  
p.[REDACTED] Ex. 7

---

**From:** [REDACTED] Ex. 7  
**Sent:** Friday, September 25, 2015 9:04 AM  
**To:** [REDACTED] Ex. 7  
**Cc:** [REDACTED]  
**Subject:** A3 etron Vehicle book typo

Good morning [REDACTED] Ex. 7

After a bit more analysis we have found the discrepancies between EPA/WOB dyno load adjustment. In the vehicle book the Dyno Set coefficients are actually for a Twin roll, not a single roll. Please see the correct values below and update verify if necessary.

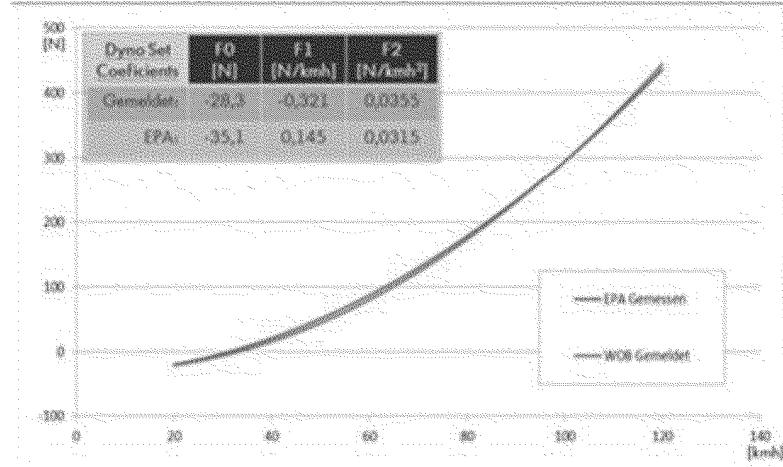
16" Twin Roll -133,5/-0,247/0,0323

16" Single Rol -53,5/-0,247/0,0323

17" Twin Roll -108,3/-0,321/0,0355

17" Single  
Roll -28,3/-0,321/0,0355

The EPA Road Load appears to be fine when compared to the correct values, so no further discussion about Roadload is necessary:



Thanks for the help,

Ex. 7

Mit freundlichen Grüßen / Regards

Ex. 7

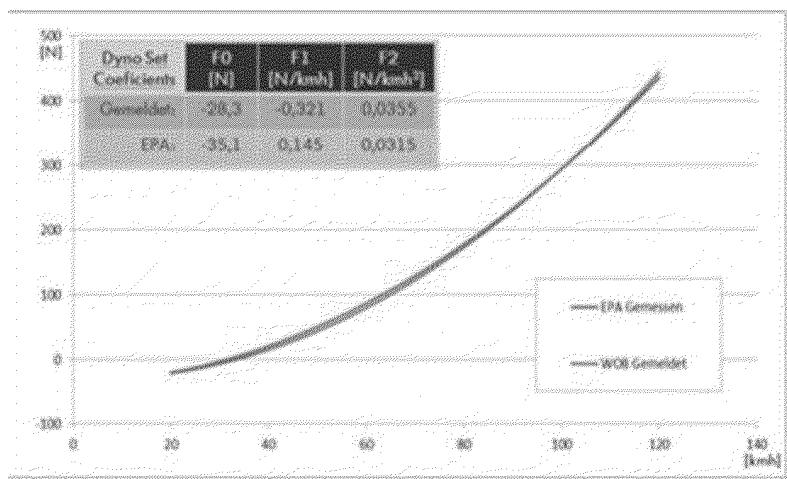


Technische  
Entwicklung  
EA - Aggregate

# Ex. 7

**Wichtiger Hinweis:** Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail zu.

**Important Notice:** The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon VOLKSWAGEN AG.



**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Fri 9/25/2015 12:23:54 PM  
**Subject:** VW Group Decision Information Pending for Golf R

Hello Jim,

I just dawned on me that we still have an unanswered Decision Information submission for the following vehicle and tests submitted on 9-16-2015. It likely fell through the cracks due to our e-tron and TDI activity recently.

This submission was related to a running change to increase the ETW for 2015 Golf R models.

Vehicle ID: FAUA-S3A

Vehicle Configuration #: 3

Test Group Name: FVGAV02.0AUA

Regards,

Bill Rodgers

Emissions Certification Engineer

Volkswagen Group

3800 Hamlin Rd

Auburn Hills, MI 48326

p. (248) 754-4219

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Thur 9/24/2015 6:39:12 PM  
**Subject:** RE: Audi e-tron tests

Great thanks

Bill

**From:** Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]  
**Sent:** Thursday, September 24, 2015 2:39 PM  
**To:** Rodgers, William (EEO)  
**Subject:** RE: Audi e-tron tests

Yes, the lab uses the default 3% rotational inertia with the 4wd dyno

**From:** Rodgers, William (EEO) [<mailto:William.Rodgers@vw.com>]  
**Sent:** Thursday, September 24, 2015 10:37 AM  
**To:** Snyder, Jim  
**Subject:** Audi e-tron tests

Hi Jim,

Considering the tests were run on a 4wd dyno, can you confirm if the standard 3% rotating mass was factored into the EPA dyno coefficients?

Regards,

Bill Rodgers

EEO

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Allen, Gregory (EEO)  
**Sent:** Mon 9/21/2015 7:03:19 PM  
**Subject:** RE: etron

Ok thanks. We will plan on being there then, and will wait to hear from Arlene on times.

Thanks Jim.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Monday, September 21, 2015 3:02 PM  
**To:** Allen, Gregory (EEO) <Gregory.Allen@vw.com>  
**Subject:** etron

Got ur vm but I'm leaving for **Ex. 6**. Being here sound slike a good idea. Arlene Smithson will call you today or Bill when they know what time tues

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Jackson, Judy[Jackson.Judy@epa.gov]; Pugliese, Holly[pugliese.holly@epa.gov]; Somoza, Sandra[Somoza.Sandra@epa.gov]; Verify[Verify@epa.gov]; Rodgers, William  
Ex. 7 [v@vw.com]  
**From:** Vincent E Coleman  
**Sent:** Tue 7/7/2015 7:59:38 PM  
**Subject:** RE: Request from VOLKSWAGEN Group of America: RE: Certificate for TG: GVGAV02.0VBD Evap: GVGAR0110VAE Is Waiting To Be Signed

It looks like the last notification was sent at 1:57 PM today. Now that the certificate has been issued these notifications may have stopped. I will check periodically to see if it happens again and warrants investigation.

Vincent

VINCENT COLEMAN  
Help Desk Analyst  
CSC

1201 M Street SE, Suite 400, Washington, DC 20003  
SES3 | p: 202-675-4112 | m: 240-338-2443 | vcoleman2@csc.com | [www.csc.com](http://www.csc.com)

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery.

NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

---

From: "Snyder, Jim" <Snyder.Jim@epa.gov>  
To: Ex. 7 [v@vw.com] Verify <Verify@epa.gov>  
Cc: "Somoza, Sandra" <Somoza.Sandra@epa.gov>; "Jackson, Judy" <Jackson.Judy@epa.gov>; "Pugliese, Holly" <pugliese.holly@epa.gov>; Vincent E Coleman/USA/CSC@CSC  
Date: 07/07/2015 03:34 PM  
Subject: RE: Request from VOLKSWAGEN Group of America: RE: Certificate for TG: GVGAV02.0VBD Evap: GVGAR0110VAE Is Waiting To Be Signed

---

I think it was a result of resubmitting into the signing queue. I had trouble getting them to "send back". Unless it happens again I don't think it warrants the help desk's time.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

-----Original Message-----

From: [REDACTED] Ex. 7 ]@vw.com]  
Sent: Tuesday, July 07, 2015 3:24 PM  
To: Snyder, Jim; Verify  
Cc: Somoza, Sandra; Jackson, Judy; Pugliese, Holly; Vincent E Coleman  
Subject: RE: Request from VOLKSWAGEN Group of America: RE: Certificate for TG: GVGAV02.0VBD Evap: GVGAR0110VAE Is Waiting To Be Signed

It was 6 copies of each message to each recipient in the office. Using ASTM rounding that's more than 6. ;) -Bill

-----Original Message-----

From: Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]  
Sent: Tuesday, July 07, 2015 3:14 PM  
To: Verify [REDACTED] Ex. 7  
Cc: Somoza, Sandra; Jackson, Judy; Pugliese, Holly; Vincent E Coleman  
Subject: RE: Request from VOLKSWAGEN Group of America: RE: Certificate for TG: GVGAV02.0VBD Evap: GVGAR0110VAE Is Waiting To Be Signed

[REDACTED] Ex. 7 was it less than 6 messages? If so I'd say lets ignore it. There were 2 certificates for same test group that I had to resubmit because they had the wrong signature on them.

-Jim

-----Original Message-----

From: Ellinger, Sandy On Behalf Of Verify  
Sent: Tuesday, July 07, 2015 2:27 PM  
To: [REDACTED] Ex. 7 Snyder, Jim  
Cc: Verify; Somoza, Sandra; Jackson, Judy; Pugliese, Holly  
Subject: Request from VOLKSWAGEN Group of America: RE: Certificate for TG: GVGAV02.0VBD Evap: GVGAR0110VAE Is Waiting To Be Signed

July 7, 2015

[REDACTED] Ex. 7 [REDACTED]

The email you have forwarded appears to be an automatic email sent to you by the VERIFY system. I have copied Jim Snyder of the Light Duty Vehicle Center in Ann Arbor. I believe Jim is your certification rep. Perhaps Jim can help resolve this issue.

Thank you.

Sandy Ellinger  
Senior Environmental Employment (SEE) Program US Environmental Protection Agency Office of Transportation and Air Quality Compliance Division \* Data Analysis and Information Center  
Tel: 734.214.4764 \* Fax: 734.214.4053 \* Office: N -102 [ellinger.sandy@epa.gov](mailto:ellinger.sandy@epa.gov)  
\* <http://epa.gov/otaq/verify/>

-----Original Message-----

From: [REDACTED] Ex. 7 ]@vw.com]  
Sent: Tuesday, July 07, 2015 12:23 PM  
To: Verify  
Subject: FW: Certificate for TG: GVGAV02.0VBD Evap: GVGAR0110VAE Is Waiting To Be Signed

We are getting repeats of the attached message over and over. Please cancel

them.

**Ex. 7**

VOLKSWAGEN GROUP OF AMERICA, INC.  
Engineering and Environmental Office  
Auburn Hills, MI

**Ex. 7**

-----Original Message-----

From: no-reply@epa.gov [mailto:[no-reply@epa.gov](mailto:no-reply@epa.gov)]

Sent: Tuesday, July 07, 2015 12:21 PM

To: [REDACTED] **Ex. 7**

Subject: Certificate for TG: GVGAV02.0VBD Evap: GVGAR0110VAE Is Waiting To Be Signed

The following is a courtesy copy of status message for a Verify submission.

Any references made to links refer to links which will appear in the CDX Inbox message.

The certificate request for Test Group GVGAV02.0VBD and Evaporative Family GVGAR0110VAE has been approved and is now waiting to be signed. A copy of the signed certificate will be sent as soon as it is available.

The Verify submission this message relates to has the following values:

Test Group Name: GVGAV02.0VBD

The following transaction identifier has been assigned to this request:

\_0b883d2b-9416-461d-b3ba-2bce362882de

Please do not reply to this message.

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Tue 7/7/2015 7:34:53 PM  
**Subject:** RE: Request from VOLKSWAGEN Group of America: RE: Certificate for [REDACTED] Ex. 4 - CBI  
[REDACTED]  
**Ex. 4 - CBI**

That's fine I was just letting you know. [REDACTED] Ex. 7

-----Original Message-----

From: Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
Sent: Tuesday, July 07, 2015 3:34 PM  
To: [REDACTED] Ex. 7 Verify  
Cc: Somoza, Sandra; Jackson, Judy; Pugliese, Holly; Vincent E Coleman  
Subject: RE: Request from VOLKSWAGEN Group of America: RE: Certificate for [REDACTED] Ex. 4 - CBI  
[REDACTED]  
**Ex. 4 - CBI**

I think it was a result of resubmitting into the signing queue. I had trouble getting them to "send back". Unless it happens again I don't think it warrants the help desk's time.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

-----Original Message-----

From: [REDACTED] Ex. 7 [REDACTED] s@vv.com]  
Sent: Tuesday, July 07, 2015 3:24 PM  
To: Snyder, Jim; Verify  
Cc: Somoza, Sandra; Jackson, Judy; Pugliese, Holly; Vincent E Coleman  
Subject: RE: Request from VOLKSWAGEN Group of America: RE: Certificate for [REDACTED] Ex. 4 - CBI  
[REDACTED]  
**Ex. 4 - CBI**

It was 6 copies of each message to each recipient in the office. Using ASTM rounding that's more than 6.  
;) [REDACTED] Ex. 7

-----Original Message-----

From: Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
Sent: Tuesday, July 07, 2015 3:14 PM  
To: [REDACTED] Ex. 7 [REDACTED]  
Cc: Somoza, Sandra; Jackson, Judy; Pugliese, Holly; Vincent E Coleman  
Subject: RE: Request from VOLKSWAGEN Group of America: RE: Certificate for [REDACTED] Ex. 4 - CBI  
[REDACTED]  
**Ex. 4 - CBI**

[REDACTED] Ex. 7 was it less than 6 messages? If so I'd say lets ignore it. There were 2 certificates for same test group that I had to resubmit because they had the wrong signature on them.  
-Jim

-----Original Message-----

From: Ellinger, Sandy On Behalf Of Verify  
Sent: Tuesday, July 07, 2015 2:27 PM  
To: [REDACTED] Ex. 7 [REDACTED] Snyder, Jim

Cc: Verify; Somoza, Sandra; Jackson, Judy; Pugliese, Holly  
Subject: Request from VOLKSWAGEN Group of America: RE: Certificate for

**Ex. 4 - CBI**

**Ex. 4 - CBI**

July 7, 2015

Dear [redacted] **Ex. 7**

The email you have forwarded appears to be an automatic email sent to you by the VERIFY system. I have copied Jim Snyder of the Light Duty Vehicle Center in Ann Arbor. I believe Jim is your certification rep. Perhaps Jim can help resolve this issue.

Thank you.

Sandy Ellinger  
Senior Environmental Employment (SEE) Program US Environmental Protection Agency Office of Transportation and Air Quality Compliance Division \* Data Analysis and Information Center  
Tel: 734.214.4764 \* Fax: 734.214.4053 \* Office: N -102 ellinger.sandy@epa.gov \*  
<http://epa.gov/otaq/verify/>

-----Original Message-----

From: [redacted] **Ex. 7** @vw.com]

Sent: Tuesday, July 07, 2015 12:23 PM

To: Verify

Subject: FW: Certificate for

**Ex. 4 - CBI**

We are getting repeats of the attached message over and over. Please cancel them.

[redacted] **Ex. 7**

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.  
Engineering and Environmental Office  
Auburn Hills, MI

**Ex. 7**

-----Original Message-----

From: no-reply@epa.gov [mailto:no-reply@epa.gov]

Sent: Tuesday, July 07, 2015 12:21 PM

To: [redacted]

**Ex. 7**

Subject: Certificate for

**Ex. 4 - CBI**

The following is a courtesy copy of status message for a Verify submission. Any references made to links refer to links which will appear in the CDX Inbox message.

The certificate request for [redacted] **Ex. 4 - CBI** has been approved and is now waiting to be signed. A copy of the signed certificate will be sent as soon as it is available.

The Verify submission this message relates to has the following values:

**Ex. 4 - CBI**

The following transaction identifier has been assigned to this request:

**Ex. 4 - CBI**

Please do not reply to this message.

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Tue 7/7/2015 4:18:07 PM  
**Subject:** FW: Certificate for TG: GVGAV02.0VBD Evap: GVGAR0125VAE Is Waiting To Be Signed

Thanks very much Jim.

-----Original Message-----

From: no-reply@epa.gov [mailto:no-reply@epa.gov]  
Sent: Tuesday, July 07, 2015 12:17 PM

To: [REDACTED] Ex. 7  
[REDACTED] Ex. 7  
Subject: Certificate for TG: GVGAV02.0VBD Evap: GVGAR0125VAE Is Waiting To Be Signed

The following is a courtesy copy of status message for a Verify submission. Any references made to links refer to links which will appear in the CDX Inbox message.

The certificate request for Test Group GVGAV02.0VBD and Evaporative Family GVGAR0125VAE has been approved and is now waiting to be signed. A copy of the signed certificate will be sent as soon as it is available.

The Verify submission this message relates to has the following values:

Test Group Name: GVGAV02.0VBD

The following transaction identifier has been assigned to this request:

\_b77854eb-e75b-4778-aa4a-5813824482e8

Please do not reply to this message.

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Stump, Barbara  
**Sent:** Wed 7/1/2015 1:32:41 PM  
**Subject:** RE: 2016 Volkswagen Certification Fee Filing Forms

Hi Jim,

The payment has been received and the three test groups GVGAV03.6VUF, GVGAV03.6VUG and GVGAT03.6VUK are listed as paid in our fees system

Barbara Stump

MVECP Fees

734-214-4256

**From:** Snyder, Jim  
**Sent:** Wednesday, July 01, 2015 8:55 AM  
**To:** Thomas, Richard (EEO); Fees  
**Cc:** Stump, Barbara  
**Subject:** RE: 2016 Volkswagen Certification Fee Filing Forms

Actually The forms are in the Certificate application but I don't go by just the form. I look in Verify and our internal database to see if it's on the paid list. Sounds like its too soon and I just need to wait a few more days. .

**From:** Thomas, Richard (EEO) [<mailto:Richard.Thomas@vw.com>]  
**Sent:** Wednesday, July 01, 2015 6:10 AM  
**To:** Fees  
**Cc:** Stump, Barbara  
**Subject:** 2016 Volkswagen Certification Fee Filing Forms

Please find the EPA fee filing for three Volkswagen 2016 test groups; GVGAV03.6VUF, GVGAV03.6VUG and GVGAT03.6VUK. Certification fees in the total amount of \$80,223 were electronically paid on June 26, 2015 and would have been available in the EPA account by last Monday, June 29<sup>th</sup>.

If you have any questions please contact me directly.

Regards,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 7/1/2015 12:58:36 PM  
**Subject:** RE: 2016 Volkswagen Certification Fee Filing Forms

I'm pretty sure that it will get acknowledged by Barbara and we will see the confirmation today.  
I'll put money on it.

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Wednesday, July 01, 2015 8:55 AM  
**To:** Thomas, Richard (EEO); Fees  
**Cc:** Stump, Barbara  
**Subject:** RE: 2016 Volkswagen Certification Fee Filing Forms

Actually The forms are in the Certificate application but I don't go by just the form. I look in Verify and our internal database to see if it's on the paid list. Sounds like its too soon and I just need to wait a few more days.. .

**From:** Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
**Sent:** Wednesday, July 01, 2015 6:10 AM  
**To:** Fees  
**Cc:** Stump, Barbara  
**Subject:** 2016 Volkswagen Certification Fee Filing Forms

Please find the EPA fee filing for three Volkswagen 2016 test groups; GVGAV03.6VUF, GVGAV03.6VUG and GVGAT03.6VUK. Certification fees in the total amount of \$80,223 were electronically paid on June 26, 2015 and would have been available in the EPA account by last Monday, June 29<sup>th</sup>.

If you have any questions please contact me directly.

Regards,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

mailto: [Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 7/1/2015 10:17:12 AM  
**Subject:** RE: cert fees  
2016 Volkswagen Certification Fee Filing Forms

Hi Jim;

They were paid last Monday, I guess I hadn't looked to see if these fees were paid to send the fee filing forms in. Thanks for reminding me. I sent the fee filing form this morning, please see my attached mail. Barbara Stump was copied. If you have any questions, please feel free to call me any time.

Thanks,

Richard

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Tuesday, June 30, 2015 5:35 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** cert fees

Richard, I was reviewing certificates and noticed that the cert fees for  
Ex. 4 - CBI are not listed as paid. Too soon or a SNAFU?

**Ex. 4 - CBI**

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)



U.S. Environmental Protection Agency  
Motor Vehicle and Engine Compliance Program  
**On-Highway Fee Filing Form**

For Certification Applications Received In Calendar Year 2015

Manufacturer Name Volkswagen Group of America, Inc.

Address 3800 Hamlin Road

City/State/Zip Code/Country Auburn Hills, Michigan 48326

On-Highway Certification Request Type (check one)

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> LDV/LDT/MDPV/HDV (Chassis cert) FEDERAL (\$26,741) | <input type="checkbox"/> HDV EVAP-ONLY (\$563)  |
| <input type="checkbox"/> LDV/LDT/MDPV/HDV (Chassis cert) CAL-ONLY (\$14,193)           | <input type="checkbox"/> HDE CALIF-ONLY (\$563) |
| <input type="checkbox"/> HDE (Engine Dyno cert) FEDERAL (\$47,664)                     | <input type="checkbox"/> MOTORCYCLE (\$1,852)   |
| <input type="checkbox"/> LD/MDPV/HDV ICI (\$76,399)                                    |   |

EPA standard family or test group:

G	V	G	A	T	0	3	.	6	V	U	K
---	---	---	---	---	---	---	---	---	---	---	---

Amount paid (U.S. Funds Only):

\$ 26,741.00

Enter the check number, or the statement "WIRE" or "ACH":

ACH

Reduced Fee Section (40 CFR §1027.120)

Reduced fee calculation (minimum initial payment \$750): Total number of vehicles/units covered: \_\_\_\_\_

Aggregate retail sales price of the vehicles/units: \$ \_\_\_\_\_ x 1% = \$ \_\_\_\_\_

Check box if an Independent Commercial Importer:  List the VIN of imported vehicles/engines below:


Company Representative: Richard E Thomas Signature: R.E. Thomas

Title: Emission Cert Strategist Phone/Fax: 248 754 4213 / 248 754 4207 Date: 06/18/2015

E-mail Address: Richard.Thomas@VW.com

Submission of payments and forms:

- (1) Online: Forms may be found and submitted with or without payments online at [www.Pay.gov](http://www.Pay.gov).
- (2) By mail: For check payments only, send checks and this form to:

Environmental Protection Agency  
Motor Vehicle and Engine Compliance Program  
P.O. Box 979032  
St. Louis, MO 63197-9000

- (3) Transmit offline Wire payments to the New York Federal Reserve Bank. (See Instructions, p.2)
- (4) Transmit offline ACH payments to the Federal Reserve Bank of Cleveland. (Instructions, p.2)
- (5) Forms not submitted under (1) and (2) above can be sent as email attachments to [Fees@epa.gov](mailto:Fees@epa.gov). Forms and payments sent in ways other than the above may be delayed or ineffective. See the Instructions for sending checks and forms by private mail service (e.g., Federal Express).

The public reporting and recordkeeping burden for this collection of information is estimated to average 18 minutes per response. Send comments on EPA's need for this information, the accuracy of the provided burden estimate, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques, to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., N.W., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed Form 3520-29 to this address.

This form approved under OMB control number 2060-0545 until October 31, 2016. EPA Form 3520-29 (revised 10-2013).



U.S. Environmental Protection Agency  
Motor Vehicle and Engine Compliance Program  
**On-Highway Fee Filing Form**

For Certification Applications Received In Calendar Year 2015

Manufacturer Name Volkswagen Group of America, Inc.

Address 3800 Hamlin Road

City/State/Zip Code/Country Auburn Hills, Michigan 48326

On-Highway Certification Request Type (check one)

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> LDV/LDT/MDPV/HDV (Chassis cert) <b>FEDERAL (\$26,741)</b> | <input type="checkbox"/> HDV EVAP-ONLY (\$563)  |
| <input type="checkbox"/> LDV/LDT/MDPV/HDV (Chassis cert) <b>CAL-ONLY (\$14,193)</b>           | <input type="checkbox"/> HDE CALIF-ONLY (\$563) |
| <input type="checkbox"/> HDE (Engine Dyno cert) <b>FEDERAL (\$47,664)</b>                     | <input type="checkbox"/> MOTORCYCLE (\$1,852)   |
| <input type="checkbox"/> LD/MDPV/HDV ICI (\$76,399)   |   |

EPA standard family or test group:

G	V	G	A	V	0	3	.	6	V	U	G
---	---	---	---	---	---	---	---	---	---	---	---

Amount paid (U.S. Funds Only):

\$ 26,741.00

Enter the check number, or the statement "WIRE" or "ACH":

ACH

Reduced Fee Section (40 CFR §1027.120)

Reduced fee calculation (minimum initial payment \$750): Total number of vehicles/units covered: \_\_\_\_\_

Aggregate retail sales price of the vehicles/units: \$ \_\_\_\_\_ x 1% = \$ \_\_\_\_\_

Check box if an Independent Commercial Importer:  List the VIN of imported vehicles/engines below:


Company Representative: Richard E Thomas Signature:

Title: Emission Cert Strategist Phone/Fax: 248 754 4213 / 248 754 4207 Date: 06/18/2015

E-mail Address: Richard.Thomas@VW.com

Submission of payments and forms:

- (1) Online: Forms may be found and submitted with or without payments online at [www.Pay.gov](http://www.Pay.gov).  
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This form approved under OMB control number 2060-0545 until October 31, 2016. EPA Form 3520-29 (revised 10-2013).



U.S. Environmental Protection Agency  
Motor Vehicle and Engine Compliance Program  
**On-Highway Fee Filing Form**

For Certification Applications Received In Calendar Year 2015

Manufacturer Name Volkswagen Group of America, Inc.

Address 3800 Hamlin Road

City/State/Zip Code/Country Auburn Hills, Michigan 48326

On-Highway Certification Request Type (check one)

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> LDV/LDT/MDPV/HDV (Chassis cert) FEDERAL (\$26,741) | <input type="checkbox"/> HDV EVAP-ONLY (\$563)  |
| <input type="checkbox"/> LDV/LDT/MDPV/HDV (Chassis cert) CAL-ONLY (\$14,193)           | <input type="checkbox"/> HDE CALIF-ONLY (\$563) |
| <input type="checkbox"/> HDE (Engine Dyno cert) FEDERAL (\$47,664)                     | <input type="checkbox"/> MOTORCYCLE (\$1,852)   |
| <input type="checkbox"/> LD/MDPV/HDV ICI (\$76,399)                                    |   |

EPA standard family or test group:

G	V	G	A	V	0	3	.	6	V	U	F
---	---	---	---	---	---	---	---	---	---	---	---

Amount paid (U.S. Funds Only):

\$ 26,741.00

Enter the check number, or the statement "WIRE" or "ACH":

ACH

Reduced Fee Section (40 CFR §1027.120)

Reduced fee calculation (minimum initial payment \$750): Total number of vehicles/units covered: \_\_\_\_\_

Aggregate retail sales price of the vehicles/units: \$ \_\_\_\_\_ x 1% = \$ \_\_\_\_\_

Check box if an Independent Commercial Importer:  List the VIN of imported vehicles/engines below:


Company Representative: Richard E Thomas Signature:

Title: Emission Cert Strategist Phone/Fax: 248 754 4213 / 248 754 4207 Date: 06/18/2015

E-mail Address: Richard.Thomas@VW.com

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This form approved under OMB control number 2060-0545 until October 31, 2016. EPA Form 3520-29 (revised 10-2013).

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Tue 6/30/2015 5:29:12 PM  
**Subject:** RE: Voice Mail from Jim Snyder (Work) (2 minutes and 1 second)

Hi Jim:

I just listened to your message. It was quite clear. I will review the guidance document and inform our colleagues in Wolfsburg.

Thanks for the information.

Regards,

**Ex. 7**

---

**Ex. 7**

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: [REDACTED] **Ex. 7**

Cell: [REDACTED] **Ex. 7**

Fax: [REDACTED] **Ex. 7**

E-Mail: [REDACTED] **Ex. 7**

**From:** Microsoft Outlook **On Behalf Of** Jim Snyder  
**Sent:** Tuesday, June 30, 2015 12:31 PM  
**To:**  **Ex. 7**  
**Subject:** Voice Mail from Jim Snyder (Work) (2 minutes and 1 second)

You received a voice mail from Jim Snyder at (734) 214-4946

Caller-Id: (734) 214-4946  
Company: USEPA  
Work: 1-734-214-4946  
E-mail: snyder.jim@epamail.epa.gov  
IM Address: snyder.jim@epamail.epa.gov

**To:** 'ball.joel@epa.gov'['ball.joel@epa.gov']; Beierschmitt, Thomas (T.A.){[tbeiers1@ford.com]; 'Berg, Olle ()'[olle.berg@volvocars.com]; 'Bob Maxwell'[remaxwell@comcast.net]; 'brian.mace@horiba.com'[brian.mace@horiba.com]; 'Buller, Patrick'[patrick.buller@volvocars.com]; Paulina, Carl{[paulina.carl@epa.gov]; 'Chris Nevers'[cnevers@autoalliance.org]; 'Christopher J Twarog '[christopher.twarog@gm.com]; 'david.woods@chrysler.com'[david.woods@chrysler.com]; 'Dennis Pawlak'[Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid'[Douglas.Reid@na.mitsubishi-motors.com]; 'Dr. Robert Otto Rasmussen, PE '[Robotto@TheTranstecGroup.com]; 'Duoba, Mike'[mduoba@anl.gov]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; 'guanghui.cai@gm.com'[guanghui.cai@gm.com]; 'Jeff Foor'[jdf14@chrysler.com]; 'Jenny.Sigelko@vw.com'[Jenny.Sigelko@vw.com]; 'JNIKEUS@volvocars.com'[JNIKEUS@volvocars.com]; 'Keith Thompson'[Keith.Thompson@bepco.com]; 'kyle.bedsole@gm.com'[kyle.bedsole@gm.com]; 'Mahmoud Yassine'[mky@chrysler.com]; 'Mahrous Michel (FCA) <micHEL.mahrous@fcagroup.com>[micHEL.mahrous@fcagroup.com]; 'Marc Belzile'[marc.a.belzile@tc.gc.ca]; 'mark paxton'[mpaxton@ganassi.com]; McCarthy, Chris (C.)[CMCCAR61@ford.com]; 'Meyer, Norm'[norm.meyer@tc.gc.ca]; 'mike.timmerman@horiba.com'[mike.timmerman@horiba.com]; Okawa, Naoyasu (N.)[okawa.n@mazda.co.jp]; Peabody, Jason (J.A.)[jpeabod6@ford.com]; 'Peter Z. Janosi'[peter.janosi@roush.com]; 'RMiller@hatci.com'[RMiller@hatci.com]; 'Roxanne Loeffler'[rloeffler@sae.org]; 'Schlueter, Hannah (EASZ/1)'[hannah.schlueter@volkswagen.de]; 'sconrad@hatci.com'[sconrad@hatci.com]; 'snyder.jim@epa.gov'[snyder.jim@epa.gov]; 'Steve Karamihas'[stevemk@umich.edu]; 'steve.baldus@gm.com'[steve.baldus@gm.com]; 'Suanne.Thomas@vw.com'[Suanne.Thomas@vw.com]; 'tom.beierschmitt@tema.toyota.com'[tom.beierschmitt@tema.toyota.com]; 'tommy\_chang@ahm.honda.com'[tommy\_chang@ahm.honda.com]; 'Vineet Mehta'[vineet@teslamotors.com]; 'William Beggs <william.beggs@gm.com>'[william.beggs@gm.com]; Ott, William[ott.william@epa.gov]; 'william.meschievitz@tema.toyota.com'[william.meschievitz@tema.toyota.com]; Wright, DavidA[Wright.DavidA@epa.gov]; 'yosuke\_sato@ahm.honda.com'[yosuke\_sato@ahm.honda.com]; Yuhasse, Nicole (L.){[nyuhase@ford.com]

**From:** Glodich, Jeffrey (J.M.)  
**Sent:** Tue 6/23/2015 11:36:11 AM  
**Subject:** Next LDVP Meeting

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**To:** Rodgers, William (EEO)[William.Rodgers@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]; Wilson, Dale[Wilson.Dale@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Thur 6/18/2015 3:08:03 PM  
**Subject:** RE: VW361-6-0106

Hello Bill,

The vehicle has been released and is outside.

Thanks Bill,

Vince Mazaitis

**From:** Rodgers, William (EEO) [mailto:William.Rodgers@vw.com]  
**Sent:** Thursday, June 18, 2015 10:33 AM  
**To:** Mazaitis, Vincent  
**Subject:** RE: VW361-6-0106

Vince,

We plan to pick up this vehicle after lunch. Please confirm that it's been released and outside.  
Many thanks

Bill

**From:** Rodgers, William (EEO)  
**Sent:** Wednesday, June 17, 2015 1:45 PM  
**To:** 'Mazaitis, Vincent'  
**Cc:** Snyder, Jim; Giles, Michael; Allen, Gregory (EEO)  
**Subject:** RE: VW361-6-0106

Ok thanks.

Please release the car for pick up.

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**From:** Mazaitis, Vincent [<mailto:mazaitis.vincent@epa.gov>]  
**Sent:** Wednesday, June 17, 2015 1:08 PM  
**To:** Rodgers, William (EEO)  
**Cc:** Snyder, Jim  
**Subject:** VW361-6-0106

Please find enclosed, the Subject information. If you have any questions or concerns, please contact me.

Thank you,

Vince Mazaitis

(734)214-4864

**From:** [REDACTED] **Ex. 7**  
**Location:** Skype Meeting  
**Importance:** Normal  
**Subject:** Volkswagen SIL Survey  
**Start Date/Time:** Thur 6/18/2015 1:30:00 PM  
**End Date/Time:** Thur 6/18/2015 2:00:00 PM

.....  
.....

To all:

I just spoke with Jim Snyder and the conference call is on as scheduled.

[Ex. 7]

-----  
Hello Jim:

I have set this tentative telephone call to further discuss the VW SIL survey topic.

Please let me know if you are available or prefer an alternate time.

Thanks

[Ex. 7]

.....

## Join Skype Meeting

This is an online meeting for Skype for Business, the professional meetings and communications app formerly known as Lync.

### **Join by phone**

[+1 \(248\) 754-6400](#) (Auburn Hills) English (United States)

[+1 \(855\) 858-8080](#) (Auburn Hills) English (United States)

[+1 \(248\) 630-0170](#) (Auburn Hills) English (United States)

[+1 \(248\) 754-5055](#) (Auburn Hills) English (United States)

Find a local number

### **Non-Responsive**

[Forgot your dial-in PIN?](#) | [Help](#)

.....

**To:** Glodich, Jeffrey (J.M.)[jglodich@ford.com]; 'ball.joel@epa.gov'[ball.joel@epa.gov]; Beierschmitt, Thomas (T.A.)[tbeiers1@ford.com]; 'Berg, Olle ('[olle.berg@volvocars.com]; 'Bob Maxwell'[remaxwell@comcast.net]; 'Buller, Patrick'[patrick.buller@volvocars.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Christopher J Twarog [christopher.twarog@gm.com]; 'david.woods@chrysler.com'[david.woods@chrysler.com]; 'Dennis Pawlak'[Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid'[Douglas.Reid@na.mitsubishi-motors.com]; Dr. Robert Otto Rasmussen, PE [Robotto@TheTranstecGroup.com]; 'Duoba, Mike'[mduoba@anl.gov]; guanghui.cai@gm.com[guanghui.cai@gm.com]; 'Jeff Foor'[jdf14@chrysler.com]; 'Jenny.Sigelko@vw.com'[Jenny.Sigelko@vw.com]; 'JNIKEUS@volvocars.com'[JNIKEUS@volvocars.com]; 'Keith Thompson'[Keith.Thompson@bepco.com]; kyle.bedsole@gm.com[kyle.bedsole@gm.com]; 'Mahmoud Yassine'[mkky@chrysler.com]; Mahrous Michel (FCA) <michel.mahrous@fcagroup.com>[michel.mahrous@fcagroup.com]; 'Marc Belzile'[marc.a.belzile@tc.gc.ca]; 'mark paxton'[mpaxton@ganassi.com]; McCarthy, Chris (C.)[CMCCAR61@ford.com]; 'Meyer, Norm'[norm.meyer@tc.gc.ca]; mike.timmerman@horiba.com[mike.timmerman@horiba.com]; Okawa, Naoyasu (N.)[okawa.n@mazda.co.jp]; Peabody, Jason (J.A.)[jpeabod6@ford.com]; 'Peter Z. Janosi'[peter.janosi@roush.com]; 'RMiller@hatci.com'[RMiller@hatci.com]; 'Roxanne Loeffler'[rloeffler@sae.org]; 'Schlueter, Hannah (EASZ/1)'[hannah.schlueter@volkswagen.de]; sconrad@hatci.com [sconrad@hatci.com]; 'snyder.jim@epa.gov'[snyder.jim@epa.gov]; Steve Karamihas[stevemk@umich.edu]; steve.baldus@gm.com[steve.baldus@gm.com]; 'Suanne.Thomas@vw.com'[Suanne.Thomas@vw.com]; 'tom.beierschmitt@tema.toyota.com'[tom.beierschmitt@tema.toyota.com]; 'tommy\_chang@ahm.honda.com'[tommy\_chang@ahm.honda.com]; William Beggs <william.beggs@gm.com>[william.beggs@gm.com]; Ott, William[ott.william@epa.gov]; william.meschievitz@tema.toyota.com[william.meschievitz@tema.toyota.com]; Wright, DavidA[Wright.DavidA@epa.gov]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Yuhase, Nicole (L.)[nyuhase@ford.com]; Chen, Elaine (E.Y.){echen8@ford.com}; Jacobson, Mark (M.F.){mjacobso@ford.com}

**Cc:** 'Nikeus, Jill (J.N.)'[jill.nikeus@volvocars.com]; Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]

**From:** Vineet Mehta  
**Sent:** Wed 6/17/2015 6:56:51 PM  
**Subject:** RE: SAE Light-Duty Vehicle Performance and Economy Measures Committee Meeting Appendix C Future Test Methodology aka Option 3.docx

Hi All,

This is a friendly reminder for everyone to do their homework on both the appendices before the next meeting (June 25<sup>th</sup>)

For Option 2 (5-cycle methodology for BEVs)

- Please review and make sure you understand all the steps involved – both the execution of testing and the calculations for coming up with the label values.

For Option 3 (Tesla proposal or 6-cycle methodology for BEVs)

- Please go through the test methodology and the weights proposed.

- For your EV platform, what would be the new Range and MPGe values for the label if you use these proposed weights?
- Use the sensitivity tables (slides 58 and 59 on the posted Tesla presentation) to consider alternate weights that may be more appropriate for your vehicle.

Please take the time to plug these weights in to recalculate values and share with your leadership teams before we start balloting these proposals. (see attached)

Thanks for your time.

Vineet

PS: David, could you please attach latest copy of your appendix (Option 2) in case you have made any changes since the last meeting?

**From:** Glodich, Jeffrey (J.M.) [mailto:[jglodich@ford.com](mailto:jglodich@ford.com)]  
**Sent:** Monday, June 01, 2015 10:42 AM  
**To:** 'ball.joel@epa.gov'; Beierschmitt, Thomas (T.A.); 'Berg, Ollie ()'; 'Bob Maxwell'; 'Buller, Patrick'; 'Carl Paulina'; Chris Nevers; Christopher J Twarog ; 'david.woods@chrysler.com'; 'Dennis Pawlak'; 'Douglas Reid'; Dr. Robert Otto Rasmussen, PE ; 'Duoba, Mike'; guanghui.cai@gm.com; 'Jeff Foor'; 'Jenny.Sigelko@vw.com'; 'JNIKEUS@volvocars.com'; 'Keith Thompson'; kyle.bedsole@gm.com; 'Mahmoud Yassine'; Mahrous Michel (FCA) <[michel.mahrous@fcagroup.com](mailto:michel.mahrous@fcagroup.com)>; 'Marc Belzile'; 'mark paxton'; McCarthy, Chris (C.); 'Meyer, Norm'; mike.timmerman@horiba.com; Okawa, Naoyasu (N.); Peabody, Jason (J.A.); 'Peter Z. Janosi'; 'RMiller@hatci.com'; 'Roxanne Loeffler'; 'Schlueter, Hannah (EASZ/1)'; sconrad@hatci.com ; 'snyder.jim@epa.gov'; Steve Karamihas; steve.baldus@gm.com; 'Sianne.Thomas@vw.com'; 'tom.beierschmitt@tema.toyota.com'; 'tommy\_chang@ahm.honda.com'; Vineet Mehta; William Beggs <[william.beggs@gm.com](mailto:william.beggs@gm.com)>; 'William Ott'; william.meschievitz@tema.toyota.com; Wright, DavidA; yosuke\_sato@ahm.honda.com; Yuhase, Nicole (L.); Chen, Elaine (E.Y.); Jacobson, Mark (M.F.)  
**Cc:** 'Nikeus, Jill (J.N.)'; Tommy\_Chang@ahm.honda.com  
**Subject:** SAE Light-Duty Vehicle Performance and Economy Measures Committee Meeting

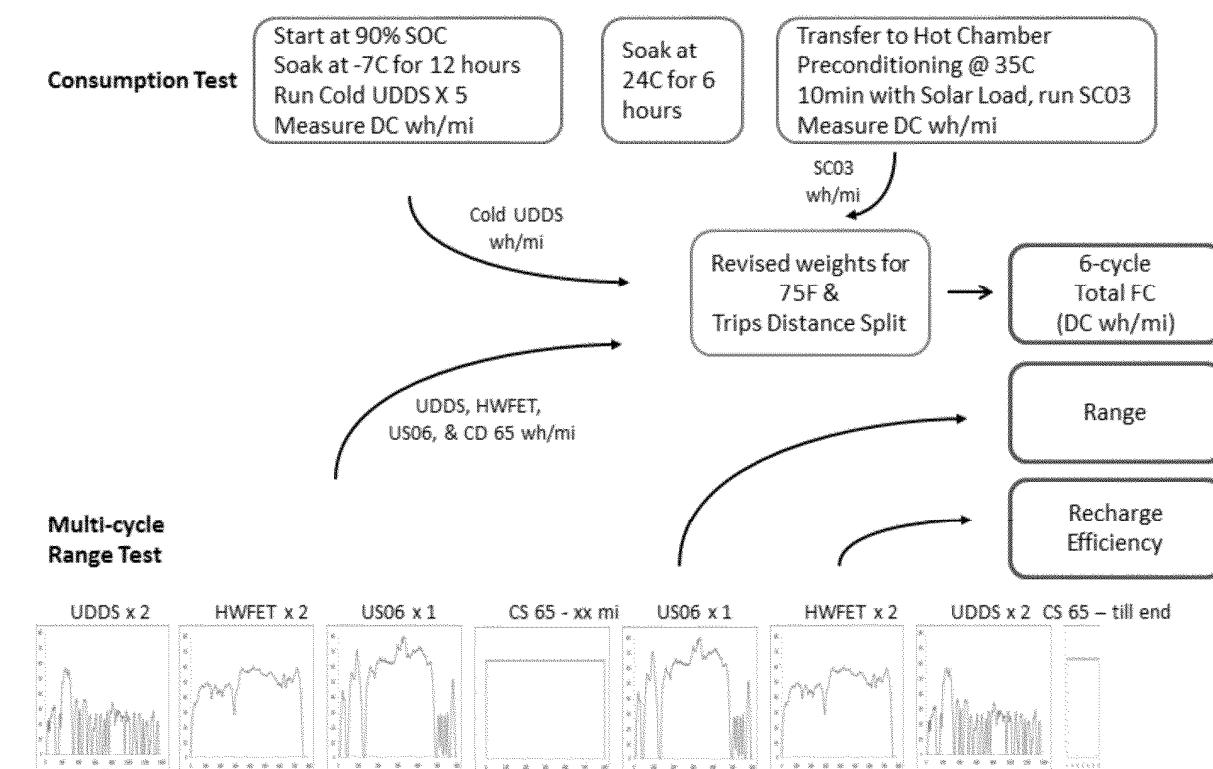
FYI, both J1634 appendix documents have been posted to the website.

Jeff



## APPENDIX C – 6-Cycle Range and Energy Consumption Procedure for BEVs

For alternate fuel vehicles such as BEVs, EPA regulations allow consideration of alternate methods to calculate label values – fuel economy and range – as mentioned in §600.210-08. The existing test method directly ties consumption and vehicle range with a single adjustment factor, which does not convey the truth about EV ownership. The vast majority of trips are short. Moreover, vehicle efficiency varies significantly with trip distance. Short trips consume more energy per mile. This is a significant and important departure from the distinction between City and Highway driving that is currently being applied. Range & MPGe are separate concerns in the EV experience and there are several reasons they should not be derated the same way. Below methodology attempts to separately and appropriately treat those quantities while incorporating the existing drive cycles, relative contributions of AC and heater use as informed by EPA's 5-cycle guidance document, and the multi-cycle full depletion test developed by SAE's J1634 committee. Overall, it leads to a fair and condensed test procedure that accurately represents energy consumption and range for BEVs regardless of battery/platform size.

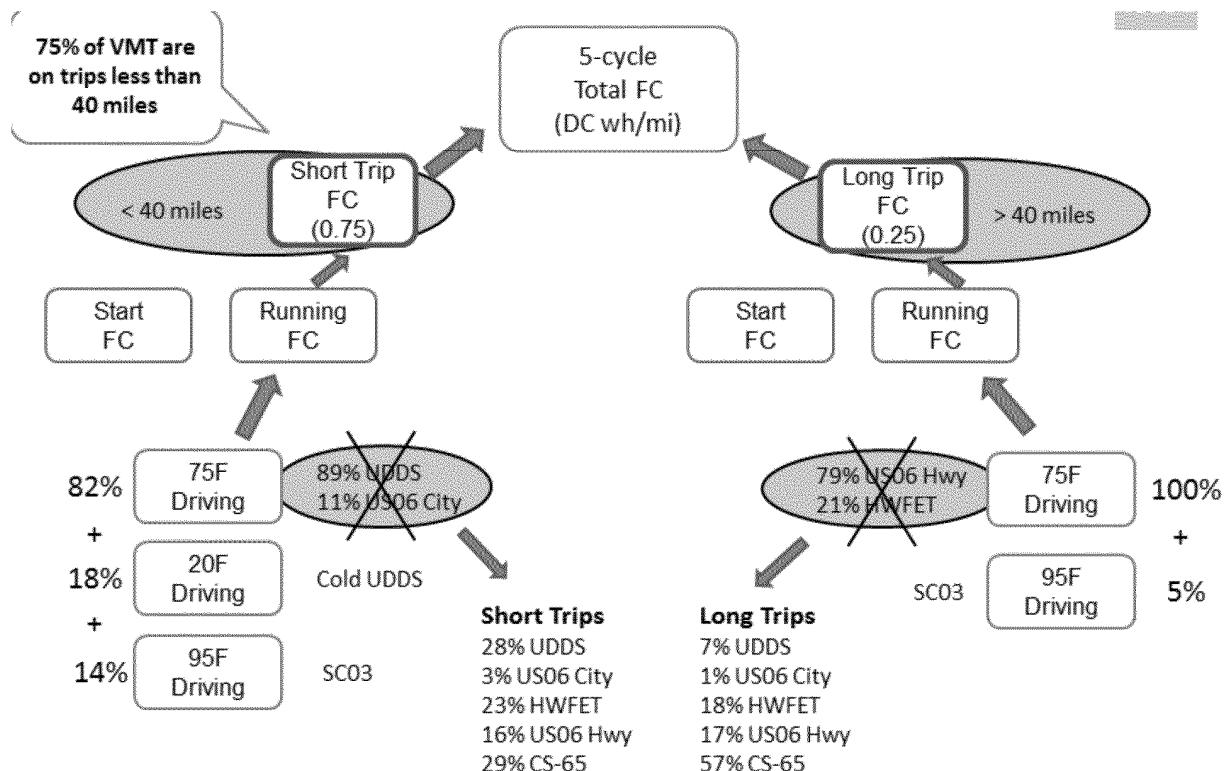


### Overall Test Process

1. Run MCT full discharge test at ambient conditions starting at 100% SOC to obtain
  - a. Net Battery discharge kWh (UBEDC)
  - b. Average US06 city and US06 Hwy mi/WhDC
  - c. Average HWFET mi/WhDC
  - d. Average 65mph mi/WhDC
  - e. Average UDDS mi/whDC
  - f. UDDS Bag1FE75, Bag2FE75, Bag3FE75, Bag4FE75
2. After the full discharge the car to full under ambient conditions to obtain
  - a. AC kWh as measured from the wall
3. Run 20°F Cold FTP test (5x) starting at 90% SOC to obtain
  - a. Total mi/WhDC (total distance/total DC discharge kWh) over 5 cycles
  - b. Cold FTP Bag1FE20, Bag2FE20, Bag3FE20, Bag4FE20
4. Run 95F SC03 test to obtain
  - a. SC03FE

## Calculations for Label Values – MPGe and Range

1. Energy Consumption (MPGe)
  - a. Calculate Short Trip FE
    - i.  $\text{StartFC\_Short} = 0.33 * ((0.76 * \text{StartFuel\_75} + 0.24 * \text{StartFuel\_20}) / 4.1);$
    1.  $\text{StartFuel\_75} = 3.6 * (1/\text{Bag1FE75} - 1/\text{Bag3FE75}) + 3.9 * (1/\text{Bag2FE75} - 1/\text{Bag4FE75});$
    2.  $\text{StartFuel\_20} = 3.6 * (1/\text{Bag1FE20} - 1/\text{Bag3FE20});$
    - ii.  $\text{RunningFC\_Short} = 0.82 * (0.28/\text{UDDSFE} + 0.23/\text{HWFETFE} + 0.03/\text{US06CityFE} + 0.16/\text{US06HwyFE} + 0.29/65\text{mphFE}) + 0.18(20/\text{UDDSFE}) + 0.133 * 1.083 * \text{ACFC},$  where  $\text{ACFC} = (1./\text{five.SC03FE95} - (0.61./\text{five.Bag3FE75} + 0.39./\text{five.Bag4FE75}))$
    - iii.  $\text{Total FE Short} = 0.92 / (\text{StartFC Short} + \text{RunningFC Short})$
  - b. Calculate Long Trip FE
    - i.  $\text{StartFC\_Long} = 0.33 * ((0.76 * \text{StartFuel\_75} + 0.24 * \text{StartFuel\_20}) / 60);$
    - ii.  $\text{RunningFC\_Long} = 1.007 * (0.07/\text{UDDSFE} + 0.01/\text{US06CityFE} + 0.17/\text{US06HwyFE} + 0.18/\text{HWFETFE} + 0.57/65\text{mphFE}) + 0.133 * 0.377 * \text{ACFC}$
    - iii.  $\text{Total FE Long} = 0.92 / (\text{StartFC Long} + \text{RunningFC Long})$
  - c. Harmonically average Short trip FE (75%) and Long trip FE (25%) to obtain 6-cycle Total FC =  $0.75/\text{Short Trip FE} + 0.25/\text{Long Trip FE}$
  - d. Divide Total FC (inverse of Total FE) by recharge efficiency obtained in \_\_\_\_\_ to obtain Total AC wh/mi = Total FC / Recharge efficiency; where Recharge efficiency = net discharge kWh divided by AC recharge kWh
  - e. Divide Gasoline equivalent energy (33705 wh/gal) by Total AC FC to obtain MPGe



2. Range in miles

- a. Calculate weighted Total Wh/mi based on Long trips
  - i. Weighted FE =  $0.07 \times \text{Average UDDS wh/mi} + 0.01 \times \text{US06City wh/mi} + 0.17 \times \text{US06Hwy wh/mi} + 0.18 \times \text{HWFET wh/mi} + 0.57 \times 65\text{mph Wh/mi}$
- b. Add Long Trip HVAC load
  - i. Total FE =  $1.007 * (1/\text{Weighted FE}) + 0.133 * 0.377 * \text{ACFC}$
- c. Adjust for non-dynamometer effects
  - i. Final FC =  $0.92 / \text{Total FE}$
- d. Range
  - i. UBEDC / Final FC

**To:** Mazaitis, Vincent[mazaitis.vincent@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]; Giles, Michael (EEO)[michael.giles@vw.com]; Allen, Gregory (EEO)[Gregory.Allen@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Wed 6/17/2015 5:45:28 PM  
**Subject:** RE: **Ex. 4 - CBI**

Ok thanks.

Please release the car for pick up.

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**From:** Mazaitis, Vincent [mailto:[mazaitis.vincent@epa.gov](mailto:mazaitis.vincent@epa.gov)]  
**Sent:** Wednesday, June 17, 2015 1:08 PM  
**To:** Rodgers, William (EEO)  
**Cc:** Snyder, Jim  
**Subject:** VW361-6-0106

Please find enclosed, the Subject information. If you have any questions or concerns, please contact me.

Thank you,

Vince Mazaitis

(734)214-4864

**To:** Bill Rodgers (william.Rodgers@vw.com)[william.Rodgers@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Wed 6/17/2015 5:07:59 PM  
**Subject:** VW361-6-0106  
VW361-6-0106\_6-16-15.pdf

Please find enclosed, the Subject information. If you have any questions or concerns, please contact me.

Thank you,

Vince Mazaitis  
(734)214-4864

CERT

CVS

## NVFEL Laboratory Test Data

## Final Laboratory Test Results

Test Number: 2015-0224-005



Test Date: 6/16/2015

Key Start: 09:38:52

Fuel Container ID: F0027N

Fuel Type: 61 Tier 2 Cert Test Fuel

Test Procedure: 89 US06

FE Calculation Method: Gasoline

Pretest Remarks:

Drive Axle: FWD

Vehicle ID: VW3G1-6-0106

MFR Name: Volkswagen Group of

10015

MFR Codes: VGA

00

Config #: 00

Transmission: Auto

Shift Schedule: AOEPA0041

004495.0 MI

Drive Schedule: us06warmup\_2bagus06

Bag Data	N2O	HC-FID	CO	NOx	CO2	CH4	NMHC
Phase 1	(ppm)	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Sample	0.328	3.098	96.022	0.344	0.573	2.403	
Ambient	0.328	2.296	0.485	0.005	0.043	2.043	
Net Concentration	0.014	0.902	95.557	0.340	0.531	0.449	0.419

Remarks:

Phase 2

Sample	0.329	2.559	24.691	0.390	0.670	2.140	
Ambient	0.329	2.296	0.452	0.002	0.043	2.046	
Net Concentration	0.017	0.379	24.262	0.389	0.629	0.196	0.168

Remarks:

Phase 3

Sample							
Ambient							
Net Concentration							

Remarks:

Phase 4

Sample							
Ambient							
Net Concentration							

Remarks: This test has particulate results.

Results	N2O	HC-FID	CO	NOx	CO2	CH4	NMHC	VolMPG
	(gpm)	(mpg)						
Phase 1	0.001	0.023	4.908	0.026	428.9	0.013	0.011	20.516
Phase 2	0.001	0.004	0.541	0.013	220.5	0.003	0.002	40.476
Composite	0.00071	0.00833	1.50620	0.01590	266.570	0.00487	MVOC=1.04 * NMHC 0.0038 / 0.0040	

Fuel Economy	Gasoline MPG	Dyno Settings	Dyno #:
Phase 1	20.45	Aug Brake	Inertia: 3375
Phase 2	40.35	Y	EPA Set Co A: -1.47
Composite	33.15		EPA Set Co B: 0.1582
			EPA Set Co C: 0.01646
		FWD	Emiss-Bench: Mexa 7200idle

V130711-d329 EPAVDAE-m150616091155

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## NVFEL Laboratory Test Data

CVS

Test Number: 2015-0224-005

Vehicle ID: VW361-6-0108

Test Number: 2013-0624-003					Vehicle ID: VW3615-0-0106			
Results	N <sub>2</sub> O (grams)	HC-FID (grams)	CO (grams)	NOx (grams)	CO <sub>2</sub> (grams)	CH <sub>4</sub> (grams)	NMHC (grams)	Meth Response
Phase 1	0.002	0.041	8.670	0.046	757.7	0.023	0.019	1.075
Phase 2	0.004	0.026	3.367	0.081	1372.7	0.016	0.012	

#### **Test Conditions**

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>
Barometer (inHg)	29.10	29.10	
Avg Cell Temp (degF)	73.98	73.96	
Dew Point (degF)	50.02	49.71	
Specific Humidity (grains/lbm)	55.11	54.47	
NOx Corr Factor	0.9145	0.9120	
CO2 Dilution Factor	23.003	19.906	
CFV Vmix (scf @68F)	2741.55	4193.26	
Total CVS Vmix (scf@68F)	2752.00	4209.28	
CVS Flow Rate Avg (scfm)	690.57	689.30	

Fan Placement:	One Large Fan - Down - Front (US06 Only)		
Phase Time (secs)	130.00	365.00	108.20
Distance (miles)	1.766	6.225	
Bag Analysis Time (secs)	83.0	265.2	

	<b>US06-C</b>	<b>US06-H</b>	<b>US06-T</b>	<b>MFR</b>
IWR % diff	-1.308	-0.732	-3.947	-9.510
ASCR % diff	-0.914	-5.246	-2.286	-6.000
EER	-1.347	-1.653	-1.569	-4.280

## MFR Test Results

### **for Procedure 90 US06**

MFR Number	HC 0.0101	CO 0.388	NOx 0.0135	CO2 249	NMOC 0	NonMeth HC 0.0056	CH4 0.0045
10036236							
Odometer 4313 M	MPG 35.5	PM 0.001			MFR Lab:	Volksawgen AG	
MPG is 7.07 % higher than EPA MPG.				Printed: 21			

MFR Lab: Volkswagen AG

Dyno 21  
Fuel: 51 Ter 2 Carb Gasoline

\*130711-a29 EPA/NTIS-74/15091155

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NVFEL Laboratory Test Data Final Laboratory Test Results								PARTICULATE	
Test Number: 2015-0224-005  Test Date: 6/16/2015 Key Start: 09:38:52 Fuel Container ID: F0027N Fuel Type: 61 Tier 2 Cert Test Fuel Test Procedure: 89 US06 Calculation Method: Gasoline Pretest Remarks:				Vehicle ID: VW3G16-0106 MFR Name: Volkswagen Group of America MFR Codes: VGA Config #: 10015 Transmission: Auto Shift Schedule: AOEPA0041 Beginning Odometer: 004495.0 MI Drive Schedule: us06warmup_2bagus06					
All filter weights are corrected for buoyancy									
<b>Particulate</b> <u>Phase 1</u>  <u>Phase 2</u>  <u>Phase 3</u>  <u>Phase 4</u>  <u>Remarks:</u>  <u>Remarks:</u>  <u>Remarks:</u>  <u>Remarks:</u>  <u>This test has particulate results.</u>	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt	Total Mass	Total Mass	Filter comment	
	A	220213775	365.6904	365.6965	0.00606	4.788	0.599		
	B	220213776	365.0416	365.0439	0.00236	1.859	0.233		
	C	220213777	366.5719	366.5772	0.00536	4.220	0.528		
All filter weights are corrected for buoyancy									
<u>Average Results</u> <u>Phase 1</u>  <u>PM Media</u> <u>MTL_PTFE_PFA</u>				Net Wt	Total Mass	Total Mass			
2% of Avg Net or 0.01 mg	No.	Tare (Pre Wt)	Gross (Post Wt)	mg	mg	mg / mi			
0.01	1	370.85035	370.85111	0.00076	3.623	0.453			
2		364.71195	364.71290	0.00096					
All filter weights are corrected for buoyancy									
<u>Reference Filter Stability Check</u> <u>PM Media</u> <u>MTL_PTFE_PFA</u>				Stability Check	Dyno #	Dyno #			
2% of Avg Net or 0.01 mg	No.	Tare (Pre Wt)	Gross (Post Wt)	mg	PASS/FAIL	D329 - FWD			
0.01	1	370.85035	370.85111	0.00076	PASS	Inertia: 3375			
	2	364.71195	364.71290	0.00096	PASS	EPA Set Co A: -1.47			
					PASS	EPA Set Co B: 0.1582			
						EPA Set Co C: 0.01646			
Emissions Bench Mexa 7200idle									
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				Print Time 17-Jun-2015 12:17					

NVFEL Laboratory Test Data Final Laboratory Test Results							PARTICULATE
WEIGHING CHAMBER	Buoyancy	Operator	Chamber Temp	Dew Point	Barometer	Last Change in Status	Vehicle ID: VW3616-0106
	Timestamp	Factor	(°F)	(°F)	(inHg)	Status @ timestamp	
Pre-test	6/16/15 8:51	1.0003910	322990	71.7	49.5	29.07	NORM @ 06/15/15 14:25:23
Post-test	6/16/15 12:15	1.0003917	322998	71.7	49.2	29.12	NORM @ 06/16/15 10:02:28
Test Conditions		Phase 1	Phase 2	Phase 3	Phase 4		
Barometer (inHg)	29.10	29.10					
Avg Cell Temp (degF)	73.98	73.96					
Dew Point (degF)	50.02	49.71					
Specific Humidity (grains/lbm)	55.11	54.47					
NOx Corr Factor	0.9145	0.9120					
Dilution Factor	23.00	19.91					
CFV Vmix (scf @68F)	2741.55	4193.26					
Sample Volume A (scf @68F)	8.807	5.330					
Sample Volume B (scf @68F)	8.821	5.329					
Sample Volume C (scf @68F)	8.838	5.354					
Sample Volume D (scf @68F)							
Sample Volume Average (scf @68F)	8.822	5.338					
Total PM Vmix (scf @68F)	2752.00	4209.28					
Phase Time (sec)	130.00	365.00	108.20				
Distance (miles)	1.766	6.225					
PSU Probe A (degC)							
PSU Probe B (degC)							
PSU Probe C (degC)							
PSU Dil Air A (degC)	44.3	43.8					
PSU Dil Air B (degC)	38.1	38.0					
PSU Dil Air C (degC)	40.2	39.9					
PSU Filter A (degC)	44.2	44.0					
PSU Filter B (degC)	44.4	44.2					
PSU Filter C (degC)	46.3	45.7					
PSU Dil Flow A (lpm)	29.9	29.8					
PSU Dil Flow B (lpm)	29.9	29.8					
PSU Dil Flow C (lpm)	29.9	29.8					
PSU A Proportionality							
PSU B Proportionality							
PSU C Proportionality							

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**To:** [REDACTED] **Ex. 7** @vw.com]  
**Cc:** Bochenek, David[bochenek.david@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]; Haynes, Ben[haynes.ben@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Mon 6/15/2015 5:46:03 PM  
**Subject:** RE: VW361-6-0106

Hello [REDACTED] **Ex. 7** [REDACTED]

There will be no UDDS prep prior to the US06. As it is a "stand alone" US06" that sat more than 72 hours, has already received a fuel exchange. The procedure is to run a warm-up US06 followed by a measured US06.

When I spoke with the Lab, the vehicle will probably run some time tomorrow (6/16/15) in the morning. As it is a US06, the manufacturer will not be asked to witness the start of the warm-up, if here. If here, I will inform you (or Axel) as much information as I can, as to the outcome.

Thanks [REDACTED] **Ex. 7** [REDACTED]

Vince Mazaitis

**From:** [REDACTED] **Ex. 7** [REDACTED] @vw.com]  
**Sent:** Monday, June 15, 2015 1:14 PM  
**To:** Mazaitis, Vincent  
**Subject:** RE: VW361-6-0106

Vince,

In this case do your run a Hwy or UDDS before hand?

What time do you think the test will run?

**Ex. 7**

**From:** Mazaitis, Vincent [mailto:[mazaitis.vincent@epa.gov](mailto:mazaitis.vincent@epa.gov)]

**Sent:** Monday, June 15, 2015 1:11 PM

**To:**  Ex. 7 Snyder, Jim

**Cc:**  Ex. 7

**Subject:** RE: VW361-6-0106

Hello  Ex. 7

The US06 retest is scheduled for tomorrow. As the US06 is a hot test, there is no need for a soak.

Thanks  Ex. 7

Vince Mazaitis

**From:**  Ex. 7  @vw.com]

**Sent:** Friday, June 12, 2015 10:33 AM

**To:** Snyder, Jim

**Cc:** Mazaitis, Vincent;  Ex. 7

**Subject:** RE: VW361-6-0106

Hell Jim,

We would like to retest the US06 as the result of exceeding the 3% criteria.

Please schedule the test as soon as possible and let us know the new test date.

Regards,

## Ex. 7

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

## Ex. 7

**From:** Mazaitis, Vincent [mailto:[mazaitis.vincent@epa.gov](mailto:mazaitis.vincent@epa.gov)]

**Sent:** Friday, June 12, 2015 7:36 AM

**To:**  Ex. 7

**Cc:** Snyder, Jim

**Subject:** VW361-6-0106

Good morning  Ex. 7

This data is in Verify. Please check your N0x additive.

Please find enclosed, the Subject information. If you have any questions or concerns, please contact me.

Thank you,

Vince Mazaitis

(734)214-4864

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Mon 6/15/2015 2:30:19 PM  
**Subject:** RE: Jetta retest

Thanks.

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Monday, June 15, 2015 10:12 AM  
**To:** Rodgers, William (EEO)  
**Subject:** Jetta retest

I talked to Ben and they plan to retest the Jetta some time Tuesday.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Fri 6/12/2015 2:02:54 PM  
**Subject:** MY2016 Volkswagen Carryover Application Submitted

Hello Jim,

This morning I uploaded the MY2016 Application for the Volkswagen carryover GVGAJ02.0VUE testgroup. I uploaded the cert request for all three EVAP families involved.

Please let us know if you have any questions upon your review.

Have a good weekend!

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Mazaitis, Vincent[mazaitis.vincent@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]; Giles, Michael (EEO)[michael.giles@vw.com]; Allen, Gregory (EEO)[Gregory.Allen@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Fri 6/12/2015 12:49:12 PM  
**Subject:** RE: VW361-6-0106

Thanks Vince and Jim.

The additive DF's are EPA assigned so that's why they are a bit high. The good news is it passed and result correlation was very good expect for the US06.

We will advise you soon about a possible retest of US06

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**From:** Mazaitis, Vincent [mailto:[mazaitis.vincent@epa.gov](mailto:mazaitis.vincent@epa.gov)]  
**Sent:** Friday, June 12, 2015 7:36 AM  
**To:** Rodgers, William (EEO)  
**Cc:** Snyder, Jim  
**Subject:** VW361-6-0106

Good morning Bill,

This data is in Verify. Please check your N0x additive.

Please find enclosed, the Subject information. If you have any questions or concerns, please contact me.

Thank you,

Vince Mazaitis

(734)214-4864

**To:** Bill Rodgers (william.Rodgers@vw.com)[william.Rodgers@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Thur 6/11/2015 10:57:08 AM  
**Subject:** VW361-4-0194/16  
VW361-4-0194-16\_6-10-15.pdf

Please find enclosed, the Subject information. If you have any questions or concerns, please contact me.

Thank you,

Vince Mazaitis  
(734)214-4864

CERT

CVS

**NVFEL Laboratory Test Data  
Final Laboratory Test Results**

Test Number: 2015-0203-001



Test Date: 6/10/2015  
 Key Start / Hot Soak: 08:57:21 / 10:21  
 Fuel Container ID: F0027N  
 Fuel Type: 61 Tier 2 Cert Test Fuel  
 Test Procedure: 21 Federal fuel 2-day exhaust (w/can loa  
 FE Calculation Method: Gasoline  
 Pretest Remarks:

Drive Axle: FWD

Vehicle ID: VW3G14-0194/16

MFR Name: Volkswagen Group of  
 MFR Codes: VGA-  
 Config #: 10015  
 Transmission: Auto  
 Shift Schedule: AOEPA0005  
 Beginning Odometer: 005045.0 Mi  
 Drive Schedule: flp3bag  
 Soak Period: 19.4 hours

Bag Data	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NMHC (ppmC)
<u>Phase 1</u>						
Sample	5.275	24.779	0.894	1.005	2.576	
Ambient	2.719	0.790	0.013	0.048	2.007	
Net Concentration	2.760	24.048	0.883	0.960	0.720	1.987
Remarks:						
<u>Phase 2</u>						
Sample	2.646	2.792	0.150	0.657	1.961	
Ambient	2.724	0.775	0.011	0.046	2.007	
Net Concentration	0.056	2.056	0.140	0.613	0.052	0.000
Remarks:						
<u>Phase 3</u>						
Sample	2.844	6.057	0.158	0.684	2.163	
Ambient	2.699	0.698	0.013	0.046	1.984	
Net Concentration	0.324	5.406	0.145	0.642	0.310	-0.009
Remarks:						
<u>Phase 4</u>						
Sample						
Ambient						
Net Concentration						
Remarks:						
<b>Results</b>	<b>HC-FID (gpm)</b>	<b>CO (gpm)</b>	<b>NOx (gpm)</b>	<b>CO2 (gpm)</b>	<b>CH4 (gpm)</b>	<b>NMHC (gpm)</b>
Phase 1	0.025	0.448	0.025	281.2	0.008	0.018
Phase 2	0.001	0.061	0.006	287.1	0.001	0.000
Phase 3	0.003	0.101	0.004	246.1	0.003	0.000
Weighted	0.00653	0.15233	0.00945	274.600	0.00297	NMOG=1.04 x NMHC 0.0038 / 0.0040
<b>Fuel Economy</b>	<b>Gasoline MPG</b>		<b>Dyno Settings</b>	<b>Dyno #:</b> D002 <b>Inertia:</b> 3500 <b>EPA Set Co A:</b> 1.16 <b>EPA Set Co B:</b> 0.1893 <b>EPA Set Co C:</b> 0.01588		
Phase 1	31.68		*			
Phase 2	31.10		*			
Phase 3	36.27		*			
Weighted	32.45		<b>FWD</b>	<b>Emiss-Bench:</b> D002 Print Time 10-Jun-2015 14:24		

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NVFEL Laboratory Test Data Final Laboratory Test Results							CVS	
Test Number:	2015-0203-001						Vehicle ID:	VW3614-0194/16
<b>Results</b>	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response	
Phase 1	0.092	1.615	0.069	1013.5	0.028	0.068	1.074	
Phase 2	0.003	0.237	0.024	1109.7	0.003	0.000		
Phase 3	0.011	0.363	0.015	887.5	0.012	0.000		
<b>Test Conditions</b>	Phase 1	Phase 2	Phase 3	Phase 4				
Barometer (inHg)	28.76	28.75	28.75					
Avg Cell Temp (degF)	74.98	75.08	74.79					
Dew Point (degF)	49.13	49.13	49.07					
Specific Humidity (grains/lbm)	53.94	53.95	53.83					
NOx Corr Factor	0.9099	0.9100	0.9095					
CO2 Dilution Factor	13.296	20.380	15.135					
CFV Vmix (scf (@68F))	2037.08	3492.53	2034.50					
CVS Flow Rate Avg (scfm)	241.36	240.92	241.05					
Fan Placement: One Small Fan - Down - Front								
Phase Time (secs)	506.40	669.80	500.41					
Distance (miles)	3.605	3.665	3.606					
Bag Analysis Time (secs)	142.5	142.1	142.0					
	FTP-B1	FTP-B2	FTP-B3					
IWR % diff	-0.472	2.359	-1.355					
ASCR % diff	-0.178	1.684	-0.992					
EER	-0.782	-0.181	-1.115					
				FTP-W			MFR	
				0.784			*	
				0.611			*	
				0.582			*	

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Print Time: 10-Jun-2015 14:24

CERT

CVS

**NVFEL Laboratory Test Data**  
**Final Laboratory Test Results**

Test Number: 2015-0203-002

Vehicle ID: VW3G14-0194/16

**Test Information**

Test Date: 6/10/2015  
Key Start: 10:54:21  
Fuel Container ID: F0027N  
Fuel Type: 61 Tier 2 Cert Test Fuel  
Test Procedure: 3 HWFET (hwfetprep\_hwfet)  
FE Calculation Method: Gasoline  
Pretest Remarks:

MFR Name: Volkswagen Group of America  
MFR Codes: VGA  
Config #: 10015  
Transmission: Auto  
Shift Schedule: AEPEA0011  
Beginning Odometer: 005056.0 MI  
Drive Schedule: hwfetwarmup\_hwfet

Drive Axle: FWD

**Gas Data****Phase 1**

Sample: 2.393  
Ambient: 2.526  
Net Concentration: 0.091

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NMHC (ppmC)
Sample	2.393	5.179	0.113	1.190	1.810	
Ambient	2.526	0.642	0.017	0.045	1.940	
Net Concentration	0.091	4.594	0.097	1.148	0.042	0.046

Remarks:

**Phase 2**

Sample:  
Ambient:  
Net Concentration

Remarks:

**Phase 3**

Sample:  
Ambient:  
Net Concentration

Remarks:

**Phase 4**

Sample:  
Ambient:  
Net Concentration

Remarks:

**Results**

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC (gpm)	Vol MPG (mpg)
Phase 1	0.000	0.045	0.001	176.3	0.000	0.000	50.794

NMOC=1.04 \* NMHC

**Fuel Economy**

Gasoline MPG  
Phase 1 50.64

**Dyno Settings**

Dyno #: D002  
Inertia: 3500  
EPA Set Co A: 1.16  
EPA Set Co B: 0.1893  
EPA Set Co C: 0.01588

FWD

Emiss-Bench: D002

Print Time 10-Jun-2015 14:25

v130711 - 2002 EPAVDAEm150610101553

Page 1 of 2

NVFEL Laboratory Test Data Final Laboratory Test Results							CVS
Test Number:	2015-0203-002						Vehicle ID: VW3614-0194/16
<b>Results</b>	<b>HC-FID (grams)</b>	<b>CO (grams)</b>	<b>NOx (grams)</b>	<b>CO2 (grams)</b>	<b>CH4 (grams)</b>	<b>NMHC (grams)</b>	<b>Meth Response</b>
Phase 1	0.005	0.461	0.015	1811.4	0.002	0.002	1.074
<b>Test Conditions</b>	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>	<b>Phase 4</b>			
Barometer (inHg)	28.75						
Avg Cell Temp (degF)	75.00						
Dew Point (degF)	49.46						
Specific Humidity (grains/lbm)	54.64						
NOx Corr Factor	0.9127						
CO2 Dilution Factor	11.257						
CFV Vmix (scf @68F)	3044.74						
CVS Flow Rate Avg (scfm)	238.80						
 Fan Placement: One Small Fan - Down - Front							
Phase Time (secs)	765.00						
Distance (miles)	10.273						
Bag Analysis Time (secs)	143.2						
 <b>IWR % diff</b>	<b>HWY</b>	<b>MFR</b>					
ASCR % diff	-2.210						
EER	-2.159						
	-0.751						

**To:** Haynes, Ben[haynes.ben@epa.gov]  
**Cc:** [redacted] Ex. 7 [redacted] @vw.com; [redacted] Ex. 7 [redacted] @vw.com;  
[redacted] Ex. 7 [redacted] @vw.com; Snyder, Jim[Snyder.Jim@epa.gov]; Mazaitis,  
Vincent[mazaitis.vincent@epa.gov]  
**From:** [redacted] Ex. 7  
**Sent:** Mon 6/8/2015 1:23:13 PM  
**Subject:** VW [redacted] **Ex. 4 - CBI**

Hello Ben,

Our transport truck was slightly delayed this morning but we will be at EPA by 11-o'clock it appears. We are only be delivering [redacted] Ex. 4 - CBI [redacted] that were scheduled for tests on Wednesday 10<sup>th</sup> [redacted] Ex. 4 - CBI [redacted]. We have contacted Jim Snyder about [redacted] Ex. 4 - CBI and will likely reschedule that testing for a later date.

Regards,

[redacted] **Ex. 7** [redacted]

[redacted] **Ex. 7** [redacted]

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

[redacted] **Ex. 7** [redacted]

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Giles, Michael (EEO)  
**Sent:** Thur 6/4/2015 7:59:22 PM  
**Subject:** RE: **Ex. 4 - CBI**

Thanks for the feedback Jim, we can touch base next week. Have a good weekend!

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Thursday, June 04, 2015 3:30 PM  
**To:** Giles, Michael (EEO)  
**Subject:** **Ex. 4 - CBI**

HI Mike , I just heard you Voice mail. Its been quite the week. Not good timing for your **Ex. 4 - CBI** requests. First they took my laptop for 2 days, got the new one late yesterday, and then offsite testing today. Just got back a few minutes ago but I have to leave by 3:30 because I started way early and not authorized, or paid for overtime.

Friday isalso my day off. The good news is nothing scheduled for Monday so I hope to focus on

**Ex. 4 - CBI**

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Allen, Gregory (EEO)  
**Sent:** Wed 6/3/2015 8:18:01 PM  
**Subject:** RE: VW Group - **Ex. 4 - CBI**

Well good luck on the laptop ☺

They are the same schedules that we used last July when the **Ex. 4 - CBI** was being tested there.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Wednesday, June 03, 2015 4:15 PM  
**To:** Allen, Gregory (EEO)  
**Subject:** RE: VW Group - **Ex. 4 - CBI**

Hi Greg , I finally have my new laptop. Its not totally setup (Verify won't load) but I can at least do email.

I'm not sure if those ID# are the ones that Verify uses. As long as they have been used before we should be okay but I may need to cross reference the # if its different here internally.

-Jim

**From:** Allen, Gregory (EEO) [mailto:Gregory.Allen@vw.com]

**Sent:** Wednesday, June 03, 2015 3:33 PM  
**To:** Snyder, Jim  
**Cc:** Rodgers, William (EEO); Thomas, Richard (EEO); Giles, Michael (EEO)  
**Subject:** RE: VW Group - **Ex. 4 - CBI**

Hello Jim,

I have spoken with the factory, and the **Ex. 4 - CBI** seems our common section is a little outdated and needs some work.

Nevertheless, the correct **Ex. 4 - CBI** are already in verify, and they have the codes below:

## **Ex. 4 - CBI**

Also, I submitted the supplemental data today, please let me know if you need anything else.

Thanks Jim.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Allen, Gregory (EEO)  
**Sent:** Friday, May 29, 2015 2:06 PM  
**To:** 'Snyder, Jim'  
**Cc:** Rodgers, William (EEO); Thomas, Richard (EEO); Giles, Michael (EEO)  
**Subject:** RE: VW Group

**Ex. 4 - CBI**

Hello Jim,

Per our knowledge it uses the **Ex. 4 - CBI** already loaded and identified below:

# **Ex. 4 - CBI**

However, I will clarify with the factory to make sure nothing has changed in the recent years in regards to this schedule. We will confirm and let you know next week.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]  
**Sent:** Friday, May 29, 2015 1:31 PM  
**To:** Giles, Michael (EEO)  
**Cc:** Rodgers, William (EEO); Allen, Gregory (EEO)

**Subject:** RE: VW Group - Ex. 4 - CBI

Was out of the office yesterday. The last submission Ex. 4 - CBI  
new Ex. 4 - CBI sorted out in the lab's system.

-Jim

**From:** Giles, Michael (EEO) [mailto:[michael.giles@vw.com](mailto:michael.giles@vw.com)]  
**Sent:** Friday, May 29, 2015 10:55 AM  
**To:** Snyder, Jim  
**Cc:** Rodgers, William (EEO); Allen, Gregory (EEO)  
**Subject:** RE: VW Group - Ex. 4 - CBI

Hello Jim,

As a follow up to your earlier question about differences with the Ex. 4 - CBI here is the feedback from the factory:

**Ex. 4 - CBI**

**From:** Allen, Gregory (EEO)  
**Sent:** Friday, May 29, 2015 10:42 AM  
**To:** Snyder, Jim  
**Cc:** Rodgers, William (EEO); Giles, Michael (EEO)  
**Subject:** RE: VW Group - Ex. 4 - CBI

Hello Jim,

[redacted] **Ex. 4 - CBI** [redacted]

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Giles, Michael (EEO)  
**Sent:** Wednesday, May 27, 2015 4:22 PM  
**To:** Snyder, Jim  
**Cc:** Allen, Gregory (EEO); Rodgers, William (EEO)  
**Subject:** RE: VW Group - [redacted] **Ex. 4 - CBI** [redacted]

Hi Jim,

[redacted] **Ex. 4 - CBI** [redacted]

Please see the updated table below [redacted] **Ex. 4 - CBI** [redacted]

# **Ex. 4 - CBI**

**From:** Giles, Michael (EEO)  
**Sent:** Wednesday, May 27, 2015 2:58 PM  
**To:** Snyder, Jim  
**Cc:** Allen, Gregory (EEO); Rodgers, William  
**Subject:** VW Group - **Ex. 4 - CBI**

Hello Jim,

As we discussed yesterday, we will now begin submission of

**Ex. 4 - CBI**

**Ex. 4 - CBI**

## **Ex. 4 - CBI**

As we discussed please see the table below

**Ex. 4 - CBI**

**Ex. 4 - CBI**

Regards,

Mike

Michael Giles

Certification Engineer

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4229

Fax: 248 754 4207

mailto: [Michael.Giles@VW.com](mailto:Michael.Giles@VW.com)



**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Wed 6/3/2015 7:33:30 PM  
**Subject:** VW Group [Ex. 4 - CBI]

Sorry incorrect subject line on the previous message.

Bill Rodgers

VWGoA EEO

(248) 754-4219

**From:** Rodgers, William (EEO)  
**Sent:** Wednesday, June 03, 2015 3:18 PM  
**To:** "Jim Snyder" (Snyder.Jim@epamail.epa.gov)  
**Cc:** Allen, Gregory (EEO); Giles, Michael  
**Subject:** VW Group [Ex. 4 - CBI]

Hello Jim,

I have submitted [Ex. 4 - CBI] This  
is a [Ex. 4 - CBI] However we have some pending EPA  
[Ex. 4 - CBI] We will assign this a priority  
somewhere in middle of the list in [Ex. 4 - CBI]

Test group: { [Ex. 4 - CBI]}

Please let me know if you have any questions or concerns.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Giles, Michael (EEO)[michael.giles@vw.com]; Allen, Gregory (EEO)[Gregory.Allen@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Wed 6/3/2015 12:10:46 PM  
**Subject:** VW Group Certification Priorities

Hello Jim,

I have assembled a [Ex. 4 - CBI] priority list for your reference based on [ ] [Ex. 4 - CBI] and market introduction plans. The listed test groups are all awaiting Certificate of Conformity approvals.

Regards,

Bill

**Ex. 4 - CBI**

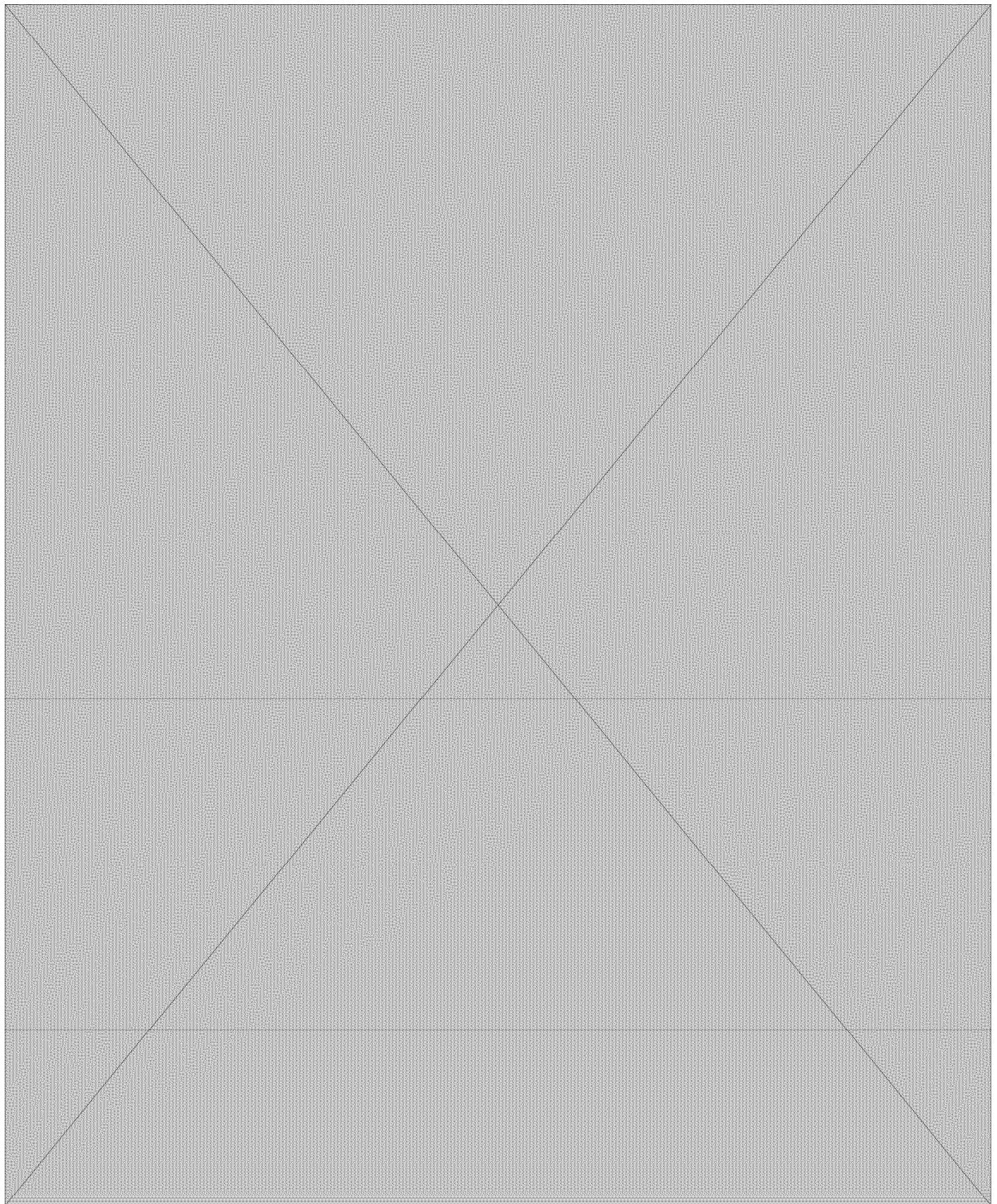
**To:** Glodich, Jeffrey (J.M.)[jglodich@ford.com]; 'ball.joel@epa.gov'['ball.joel@epa.gov']; Beierschmitt, Thomas (T.A.)[tbeiers1@ford.com]; 'Berg, Olle ()'[olle.berg@volvocars.com]; "Beth Perry <eperry@sae.org>" <BethPerry[eperry@sae.org]; 'Bob Maxwell'[remaxwell@comcast.net]; brian.mace@horiba.com[brian.mace@horiba.com]; 'Buller, Patrick'[patrick.buller@volvocars.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Christopher J Twarog [christopher.twarog@gm.com]; 'david.woods@chrysler.com'[david.woods@chrysler.com]; 'Dennis Pawlak'[Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid'[Douglas.Reid@na.mitsubishi-motors.com]; Dr. Robert Otto Rasmussen, PE [Robotto@TheTranstecGroup.com]; guanghui.cai@gm.com[guanghui.cai@gm.com]; 'Jeff Foor'[jdf14@chrysler.com]; 'Jenny.Sigelko@vw.com'[Jenny.Sigelko@vw.com]; 'JNIKEUS@volvocars.com'[JNIKEUS@volvocars.com]; 'Keith Thompson'[Keith.Thompson@bepco.com]; kyle.bedsole@gm.com[kyle.bedsole@gm.com]; 'Mahmoud Yassine'[mkky@chrysler.com]; Mahrous Michel (FCA) <michel.mahrous@fcagroup.com>[michel.mahrous@fcagroup.com]; 'Marc Belzile'[marc.a.belzile@tc.gc.ca]; 'mark paxton'[mpaxton@ganassi.com]; McCarthy, Chris (C. )[CMCCAR61@ford.com]; 'Meyer, Norm'[norm.meyer@tc.gc.ca]; mike.timmerman@horiba.com[mike.timmerman@horiba.com]; Okawa, Naoyasu (N.)[okawa.n@mazda.co.jp]; Peabody, Jason (J.A. )[jpeabod6@ford.com]; 'Peter Z. Janosi'[peter.janosi@roush.com]; 'RMiller@hatci.com'['RMiller@hatci.com']; 'Roxanne Loeffler'[rloeffler@sae.org]; 'Schlueter, Hannah (EASZ/1)'[hannah.schlueter@volkswagen.de]; sconrad@hatci.com [sconrad@hatci.com]; 'snyder.jim@epa.gov'['snyder.jim@epa.gov']; Steve Karamihas[stevemk@umich.edu]; steve.baldus@gm.com[steve.baldus@gm.com]; 'Suanne.Thomas@vw.com'[Suanne.Thomas@vw.com]; 'tom.beierschmitt@tema.toyota.com'[tom.beierschmitt@tema.toyota.com]; 'tommy\_chang@ahm.honda.com'[tommy\_chang@ahm.honda.com]; 'Vineet Mehta'[vineet@teslamotors.com]; Beggs, William S.[william.beggs@gm.com]; Ott, William[ott.william@epa.gov]; william.meschievitz@tema.toyota.com[william.meschievitz@tema.toyota.com]; Wright, DavidA[Wright.DavidA@epa.gov]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Yuhase, Nicole (L. )[nyuhase@ford.com]

**Cc:** 'Nikeus, Jill (J.N.)'[jill.nikeus@volvocars.com]; Parks, Steve (S.J. )[sparks@ford.com]

**From:** Duoba, Michael J.

**Sent:** Thur 5/28/2015 7:26:47 PM

**Subject:** RE: SAE LDVP Agenda  
removed.txt



**From:** Glodich, Jeffrey (J.M.) [mailto:[jglodich@ford.com](mailto:jglodich@ford.com)]  
**Sent:** Thursday, May 28, 2015 6:50 AM  
**To:** 'ball.joel@epa.gov'; Beierschmitt, Thomas (T.A.); 'Berg, Olle ()'; "Beth Perry <eperry@sae.org>" <BethPerry; 'Bob Maxwell'; brian.mace@horiba.com; 'Buller, Patrick'; 'Carl Paulina'; Chris Nevers; Christopher J Twarog ; 'david.woods@chrysler.com'; 'Dennis Pawlak'; 'Douglas Reid'; Dr. Robert Otto Rasmussen, PE ; Duoba, Michael J.; guanghui.cai@gm.com; 'Jeff Foor'; 'Jenny.Sigelko@vww.com'; 'JNIKEUS@volvocars.com'; 'Keith Thompson'; kyle.bedsole@gm.com; 'Mahmoud Yassine'; Mahrous Michel (FCA) <michel.mahrous@fcagroup.com>; 'Marc Belzile'; 'mark paxton'; McCarthy, Chris (C.); 'Meyer, Norm'; mike.timmerman@horiba.com; Okawa, Naoyasu (N.); Peabody, Jason (J.A.); 'Peter Z. Janosi'; 'RMiller@hatci.com'; 'Roxanne Loeffler'; 'Schlueter, Hannah (EASZ/1)'; sconrad@hatci.com ; 'snyder.jim@epa.gov'; Steve Karamihas; steve.baldus@gm.com; 'Suanne.Thomas@vww.com'; 'tom.beierschmitt@tema.toyota.com'; 'tommy\_chang@ahm.honda.com'; 'Vineet Mehta'; Beggs, William S.; 'William Ott'; william.meschievitz@tema.toyota.com; Wright, DavidA; yosuke\_sato@ahm.honda.com; Yuhase, Nicole (L.)  
**Cc:** 'Nikeus, Jill (J.N.)'; Parks, Steve (S.J.)  
**Subject:** SAE LDVP Agenda

Agenda for today attached (unchanged from tentative agenda in meeting notice).

Jeff

**To:** 'ball.joel@epa.gov'['ball.joel@epa.gov']; Beierschmitt, Thomas (T.A.)[tbeiers1@ford.com]; 'Berg, Olle ()'[olle.berg@volvocars.com]; "Beth Perry <eperry@sae.org>" <BethPerry[eperry@sae.org]; 'Bob Maxwell'[remaxwell@comcast.net]; brian.mace@horiba.com[brian.mace@horiba.com]; 'Buller, Patrick'[patrick.buller@volvocars.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Christopher J Twarog [christopher.twarog@gm.com]; 'david.woods@chrysler.com'[david.woods@chrysler.com]; 'Dennis Pawlak'[Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid'[Douglas.Reid@na.mitsubishi-motors.com]; Dr. Robert Otto Rasmussen, PE [Robotto@TheTranstecGroup.com]; 'Duoba, Mike'[mduoba@anl.gov]; guanghui.cai@gm.com[guanghui.cai@gm.com]; 'Jeff Foor'[jdf14@chrysler.com]; 'Jenny.Sigelko@vw.com'[Jenny.Sigelko@vw.com]; 'JNIKEUS@volvocars.com'[JNIKEUS@volvocars.com]; 'Keith Thompson'[Keith.Thompson@bepco.com]; kyle.bedsole@gm.com[kyle.bedsole@gm.com]; 'Mahmoud Yassine'[mkky@chrysler.com]; Mahrous Michel (FCA) <michel.mahrous@fcagroup.com>[michel.mahrous@fcagroup.com]; 'Marc Belzile'[marc.a.belzile@tc.gc.ca]; 'mark paxton'[mpaxton@ganassi.com]; McCarthy, Chris (C.)[CMCCAR61@ford.com]; 'Meyer, Norm'[norm.meyer@tc.gc.ca]; mike.timmerman@horiba.com[mike.timmerman@horiba.com]; Okawa, Naoyasu (N.)[okawa.n@mazda.co.jp]; Peabody, Jason (J.A.)[jpeabod6@ford.com]; 'Peter Z. Janosi'[peter.janosi@roush.com]; 'RMiller@hatci.com'['RMiller@hatci.com']; 'Roxanne Loeffler'[rloeffler@sae.org]; 'Schlueter, Hannah (EASZ/1)'[hannah.schlueter@volkswagen.de]; sconrad@hatci.com [sconrad@hatci.com]; 'snyder.jim@epa.gov'['snyder.jim@epa.gov']; Steve Karamihas[stevemk@umich.edu]; steve.baldus@gm.com[steve.baldus@gm.com]; 'Suanne.Thomas@vw.com'[Suanne.Thomas@vw.com]; 'tom.beierschmitt@tema.toyota.com'[tom.beierschmitt@tema.toyota.com]; 'tommy\_chang@ahm.honda.com'[tommy\_chang@ahm.honda.com]; 'Vineet Mehta'[vineet@teslamotors.com]; William Beggs <william.beggs@gm.com>[william.beggs@gm.com]; Ott, William[ott.william@epa.gov]; william.meschievitz@tema.toyota.com[william.meschievitz@tema.toyota.com]; Wright, DavidA[Wright.DavidA@epa.gov]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Yuhase, Nicole (L.)[nyuhase@ford.com]  
**Cc:** 'Nikeus, Jill (J.N.)'[jill.nikeus@volvocars.com]; Parks, Steve (S.J.)[sparks@ford.com]  
**From:** Glodich, Jeffrey (J.M.)  
**Sent:** Thur 5/28/2015 11:50:06 AM  
**Subject:** SAE LDVP Agenda

Agenda - Light Duty Vehicle Performance Measurement Standards Committee - 5\_28\_2015.doc

Agenda for today attached (unchanged from tentative agenda in meeting notice).

Jeff

**To:** Mazaitis, Vincent[mazaitis.vincent@epa.gov]  
**Cc:** Haynes, Ben[haynes.ben@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Fri 5/22/2015 2:42:12 PM  
**Subject:** RE: Ex. 4 - CBI

Pick up is scheduled for Tuesday afternoon May 26<sup>th</sup>.

Bill

**From:** Mazaitis, Vincent [mailto:mazaitis.vincent@epa.gov]  
**Sent:** Friday, May 22, 2015 10:09 AM  
**To:** Rodgers, William (EEO)  
**Cc:** Snyder, Jim; Wilson, Dale  
**Subject:** RE: Ex. 4 - CBI

Hello Bill,

I've released the Subject vehicle. If you are planning to pick it up today please give Dale Wilson a call at (734) 214-4226, as the vehicle is parked inside. If not contact Ben Haynes next week.

Have a great, safe Holiday weekend!

Vince Mazaitis

**From:** Rodgers, William (EEO) [mailto:William.Rodgers@vw.com]  
**Sent:** Friday, May 22, 2015 9:00 AM  
**To:** Mazaitis, Vincent  
**Cc:** Snyder, Jim  
**Subject:** RE: Ex. 4 - CBI

Thanks Vince. It looks like Ex. 4 - CBI  
Ex. 4 - CBIPlease release the vehicle for pick up.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**From:** Mazaitis, Vincent [<mailto:mazaitis.vincent@epa.gov>]  
**Sent:** Friday, May 22, 2015 6:59 AM  
**To:** Rodgers, William (EEO)  
**Cc:** Snyder..Jim  
**Subject:** Ex. 4 - CBI

Please find enclosed, the Subject information. If you have any questions or concerns, please contact me.

Thank you,

Vince Mazaitis

(734)214-4864

**From:** Glodich, Jeffrey (J.M.)  
**Location:** Toyota, Ann Arbor  
**Importance:** Normal  
**Subject:** SAE Light-Duty Vehicle Performance and Economy Measures Committee Meeting  
**Start Date/Time:** Thur 5/28/2015 5:00:00 PM  
**End Date/Time:** Thur 5/28/2015 7:30:00 PM

...

Tentative Agenda:

1. J1634
  - a. 5-Cycle Method 2 Appendix
  - b. 5-Cycle Method 3 Discussion
2. J2263
  - c. 1263 Open Issues
  - d. Wish-list for J2263 (posted)

SAE Light-Duty Vehicle Performance and Economy Measures Committee Meeting 1-3:30 PM, Toyota Technical Center, Ann Arbor.  
Call in number 888-270-9936

**Ex. 6**

Web Address <https://www.connectmeeting.att.com> <<https://www.connectmeeting.att.com/>>

**Ex. 6**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Mon 5/18/2015 3:12:06 PM  
**Subject:** RE: VW Groups Vehicle **Ex. 4 - CBI**

Thanks Jim.

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Monday, May 18, 2015 11:10 AM  
**To:** [REDACTED] Ex. 7  
**Cc:** Mazaitis, Vincent  
**Subject:** RE: VW Groups Vehicle **Ex. 4 - CBI**

**Ex. 7** I submitted **Ex. 4 - CBI** this morning but I'll have to talk to the lab about your [REDACTED] **Ex. 4 - CBI**  
**Ex. 4 - CBI**

**From:** [REDACTED] Ex. 7 [REDACTED] @vww.com]  
**Sent:** Monday, May 18, 2015 7:09 AM  
**To:** Snyder, Jim  
**Cc:** Glas, Tobias; Mazaitis, Vincent; [REDACTED] Ex. 7  
**Subject:** VW Groups Vehicle **Ex. 4 - CBI**

Hello Jim,

We have decided to request a retest of [REDACTED] **Ex. 4 - CBI**  
different driver. Our request is based on [REDACTED]  
[REDACTED] **Ex. 4 - CBI** Please let me know the soonest  
available test date or if you have any concerns about our request.

Regards,

**Ex. 7**

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

**Ex. 7**

**From:**  Ex. 7  
**Sent:** Thursday, May 14, 2015 8:42 AM  
**To:** 'Mazaitis, Vincent'; Glas, Tobias  
**Cc:** Snyder, Jim  
**Subject:** RE  Ex. 4 - CBI

Thanks Vince,

We are considering  Ex. 4 - CBI I hope to have the decision in a day or so. Today and tomorrow are holidays in Germany.

Regards,

**Ex. 7**

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

# Ex. 7

**From:** Mazaitis, Vincent [mailto:[mazaitis.vincent@epa.gov](mailto:mazaitis.vincent@epa.gov)]  
**Sent:** Thursday, May 14, 2015 6:42 AM  
**To:**  Ex. 7  
**Cc:** Snyder, Jim  
**Subject:**  Ex. 4 - CBI

Please find enclosed, the Subject information. If you have any questions or concerns, please contact me.

Thank you,

Vince Mazaitis

(734)214-4864

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Mon 5/18/2015 12:23:07 PM  
**Subject:** FW: VW Group

**Ex. 4 - CBI**

Jim,

Richard tells me [redacted] **Ex. 4 - CBI** [redacted] so no rush. I jumped the gun a little on the

**Ex. 4 - CBI**

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**From:** Rodgers, William (EEO)  
**Sent:** Monday, May 18, 2015 8:07 AM  
**To:** "Jim Snyder" (Snyder.Jim@epamail.epa.gov)'  
**Cc:** Giles, Michael; Allen, Gregory (EEO); Thomas, Richard (EEO)  
**Subject:** VW Group

[redacted] **Ex. 4 - CBI** [redacted]

Hello Jim,

I have submitted the following **Ex. 4 - CBI** for your review and approval for a Certificate.

**Ex. 4 - CBI**

**Ex. 4 - CBI**

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**To:** Rodgers, William (EEO)[William.Rodgers@vw.com]  
**Cc:** Glas, Tobias[Tobias.Glas@vw.com]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Tue 5/12/2015 5:24:59 PM  
**Subject:** RE: Ex. 4 - CBI

Hello Bill,

I spoke with the Lab and testing is planned first thing tomorrow, 5/13/15. My recommendation is to be here at 7:00 am if you wish to witness the start of the Ex. 4 - CBI

Thanks Bill,

Vince Mazaitis

**From:** Rodgers, William (EEO) [mailto:William.Rodgers@vw.com]  
**Sent:** Tuesday, May 12, 2015 10:55 AM  
**To:** Mazaitis, Vincent  
**Cc:** Glas, Tobias  
**Subject:** Ex. 4 - CBI

Hello Vince,

Can you give me an update on a start time for the Ex. 4 - CBI when you can?

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

Cell – (810) 287-4581

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**From:** Glas, Tobias  
**Location:** AA-Room-Office-C126-ConfRoom/AA-OTAQ-OFFICE  
**Importance:** Normal  
**Subject:** Accepted: FW: VW [REDACTED] Ex. 4 - CBI  
**Start Date/Time:** Wed 5/13/2015 1:00:00 PM  
**End Date/Time:** Wed 5/13/2015 2:00:00 PM

**From:** Schlueter, Hannah (EASZ/1)  
**Location:** AA-Room-Office-C126-ConfRoom/AA-OTAQ-OFFICE  
**Importance:** Normal  
**Subject:** Zugesagt: FW: VW { Ex. 4 - CBI }  
**Start Date/Time:** Wed 5/13/2015 1:00:00 PM  
**End Date/Time:** Wed 5/13/2015 2:00:00 PM

**From:** [REDACTED] **Ex. 7**  
**Location:** AA-Room-Office-C126-ConfRoom/AA-OTAQ-OFFICE  
**Importance:** Normal  
**Subject:** Accepted: VW [REDACTED] **Ex. 4 - CBI** [REDACTED] test drive.  
**Start Date/Time:** Wed 5/13/2015 1:00:00 PM  
**End Date/Time:** Wed 5/13/2015 2:00:00 PM

;

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Allen, Gregory (EEO)  
**Sent:** Tue 5/12/2015 2:24:28 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

I've revised the Ex. 4 - CBI Ex. 4 - CBI to reflect a new requested delivery date to EPA of **July 13, 2015**. Due to some issues in Wolfsburg, the vehicle cannot make it here in time for the original requested date of June 15, 2015.

Can you please let Ben know so that we can get this vehicle scheduled with the new test date?

I already submitted the Ex. 4 - CBI Ex. 4 - CBI yesterday, but have not yet gotten an e-mail back with a confirmed test date.

Thanks Jim.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Tue 5/12/2015 12:57:04 PM  
**Subject:** Test Date | **Ex. 4 - CBI**

Jim,

Can you check on the test date for the above mentioned vehicle. **Ex. 4 - CBI** was submitted. This is for the **Ex. 4 - CBI** that we requested a delivery date of June 8<sup>th</sup> but have not received a scheduled test notification.

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED] **Ex. 7**  
**Sent:** Tue 5/12/2015 12:31:27 PM  
**Subject:** RE: Request for Approval

**Ex. 4 - CBI**

Hello Jim,

Has there been any conclusion on the request for approval of

**Ex. 4 - CBI**

**Ex. 4 - CBI**

I know the next week is hectic, but if you could get back with me at your earliest convenience on this I would appreciate it.

Thanks Jim!

Regards,

**Ex. 7**

**From:** [REDACTED] **Ex. 7**  
**Sent:** Wednesday, April 01, 2015 3:52 PM  
**To:** snyder.jim@epa.gov  
**Cc:** [REDACTED] **Ex. 7**  
**Subject:** Request for Approval -

**Ex. 4 - CBI**

Hello Jim,

## **Ex. 4 - CBI**

## **Ex. 4 - CBI**

If you have any questions/concerns please let us know.

Best Regards,

## **Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Allen, Gregory (EEO)  
**Sent:** Fri 5/8/2015 12:46:49 PM  
**Subject:** RE: Audi [Ex. 4 - CBI] Request

Ok. Please let me know when you have had a chance to review our request more and have a more open schedule.

Thanks Jim.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Thursday, May 07, 2015 4:57 PM  
**To:** Allen, Gregory (EEO)  
**Subject:** RE: Audi [Ex. 4 - CBI] Request

I've thought about and have been surveying the other cert reps to see if there have been any request on [Ex. 4 - CBI]. This week and next are hectic due to offsite testing so I may not get a chance to respond until later next week at best.

**From:** Allen, Gregory (EEO) [mailto:Gregory.Allen@vw.com]  
**Sent:** Wednesday, May 06, 2015 2:53 PM  
**To:** Snyder, Jim  
**Subject:** RE: Audi [Ex. 4 - CBI] Request

Hello Jim,

Do you have any feedback for us on the topic below?

**Ex. 4 - CBI**

If you need anything further please let me know. Thanks Jim!

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Allen, Gregory (EEO)  
**Sent:** Friday, April 24, 2015 11:33 AM  
**To:** 'Snyder, Jim'  
**Subject:** RE: Audi **Ex. 4 - CBI** Request

Hello Jim,

Sorry for the late feedback –

**Ex. 4 - CBI**

**Ex. 4 - CBI**

# **Ex. 4 - CBI**

Please let me know if you have questions on either of these points.

Thanks Jim.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]  
**Sent:** Wednesday, April 22, 2015 11:02 AM  
**To:** Allen, Gregory (EEO)  
**Subject:** RE: Audi **Ex. 4 - CBI** Request

Greg, I have a couple questions.

**Ex. 4 - CBI**

# **Ex. 4 - CBI**

**From:** Allen, Gregory (EEO) [mailto:[Gregory.Allen@vw.com](mailto:Gregory.Allen@vw.com)]  
**Sent:** Tuesday, April 21, 2015 4:28 PM  
**To:** Snyder, Jim  
**Subject:** Audi **Ex. 4 - CBI** Request

Hello Jim,

As discussed, here is the file name that the request for approval was uploaded to Verify under:

**Ex. 4 - CBI**

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Thur 5/7/2015 5:43:36 PM  
**Subject:** VW Group

**Ex. 4 - CBI**

Hello Jim,

I have submitted test information and decision requests to Verify for the vehicles listed below.

**Ex. 4 - CBI**

Vehicle ID: **Ex. 4 - CBI**

Configuration: **Ex. 4 - CBI**

Vehicle ID: **Ex. 4 - CBI**

Configuration: **Ex. 4 - CBI**

**Ex. 4 - CBI**

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Thur 5/7/2015 5:31:46 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

I have submitted test information and a decision request for the vehicles listed below. All

**Ex. 4 - CBI**

Vehicle ID: Ex. 4 - CBI

Configuration: Ex. 4 - CBI

Vehicle ID: Ex. 4 - CBI

Configuration: Ex. 4 - CBI  
Ex. 4 - CBI

Vehicle ID: Ex. 4 - CBI

Configuration: Ex. 4 - CBI  
Ex. 4 - CBI

**Ex. 4 - CBI**

Please inform us of your decision as soon as possible.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Allen, Gregory (EEO)  
**Sent:** Wed 5/6/2015 6:53:01 PM  
**Subject:** RE: Audi [Ex. 4 - CBI] Request

Hello Jim,

Do you have any feedback for us on the topic below?

Are our interpretations correct in that this fits the requirements for [Ex. 4 - CBI]

If you need anything further please let me know. Thanks Jim!

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Allen, Gregory (EEO)  
**Sent:** Friday, April 24, 2015 11:33 AM  
**To:** 'Snyder, Jim'  
**Subject:** RE: Audi [Ex. 4 - CBI] Request

Hello Jim,

Sorry for the late feedback –

# **Ex. 4 - CBI**

## **Ex. 4 - CBI**

Please let me know if you have questions on either of these points.

Thanks Jim.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]  
**Sent:** Wednesday, April 22, 2015 11:02 AM  
**To:** Allen, Gregory (EEO)  
**Subject:** RE: Audi **Ex. 4 - CBI** Request

# **Ex. 4 - CBI**

**From:** Allen, Gregory (EEO) [<mailto:Gregory.Allen@vw.com>]  
**Sent:** Tuesday, April 21, 2015 4:28 PM  
**To:** Snyder, Jim  
**Subject:** Audi Ex. 4 - CBI Request

Hello Jim,

As discussed, here is the file name that the request for approval was uploaded to Verify under:

**Ex. 4 - CBI**

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Wed 5/6/2015 6:15:50 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

I have submitted test information and a decision request for the vehicles listed below. Both

**Ex. 4 - CBI**

Vehicle ID: **Ex. 4 - CBI**

Configuration: **Ex. 4 - CBI**

Vehicle ID: **Ex. 4 - CBI**

Configuration: **Ex. 4 - CBI**

**Ex. 4 - CBI**

Please inform us of your decision as soon as possible.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Wed 5/6/2015 2:51:45 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

## **Ex. 4 - CBI**

Please let me know if you have any questions.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED]  
**Sent:** Ex. 7  
**Mon** 5/4/2015 9:18:11 PM  
**Subject:** RE: [REDACTED] **Ex. 4 - CBI**

Hi Jim:

Thanks for the response.

On a different topic, you may recall some discussions that we had a while back regarding

[REDACTED] **Ex. 4 - CBI**

[REDACTED] We have completed a survey and would like to discuss the results with EPA, perhaps next week. In addition to you, would there be anyone else involved from EPA?

Best regards,

[REDACTED] **Ex. 7**

---

[REDACTED] **Ex. 7** [REDACTED]

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: [REDACTED] **Ex. 7** [REDACTED]

Cell: [REDACTED] **Ex. 7** [REDACTED]

Fax:

E-Ma

# Ex. 7

**From:** Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]

**Sent:** Monday, May 04, 2015 1:18 PM

**To:** Ex. 7

**Subject:** Ex. 4 - CBI

HI Ex. 7 I got your voicemail regarding

**Ex. 4 - CBI**

# Ex. 4 - CBI

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** 'ball.joel@epa.gov'['ball.joel@epa.gov']; Beierschmitt, Thomas (T.A.){[tbeiers1@ford.com]; 'Berg, Olle ()'[olle.berg@volvocars.com]; "Beth Perry <eperry@sae.org>" <BethPerry[eperry@sae.org]; 'Bob Maxwell'[remaxwell@comcast.net]; brian.mace@horiba.com[brian.mace@horiba.com]; 'Buller, Patrick'[patrick.buller@volvocars.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Christopher J Twarog [christopher.twarog@gm.com]; 'david.woods@chrysler.com'[david.woods@chrysler.com]; 'Dennis Pawlak'[Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid'[Douglas.Reid@na.mitsubishi-motors.com]; Dr. Robert Otto Rasmussen, PE [Robotto@TheTranstecGroup.com]; 'Duoba, Mike'[mduoba@anl.gov]; guanghui.cai@gm.com[guanghui.cai@gm.com]; 'Jeff Foor'[jdf14@chrysler.com]; 'Jenny.Sigelko@vw.com'[Jenny.Sigelko@vw.com]; 'JNIKEUS@volvocars.com'[JNIKEUS@volvocars.com]; 'Keith Thompson'[Keith.Thompson@bepco.com]; kyle.bedsole@gm.com[kyle.bedsole@gm.com]; 'Mahmoud Yassine'[mkky@chrysler.com]; Mahrous Michel (FCA) <michel.mahrous@fcagroup.com>[michel.mahrous@fcagroup.com]; 'Marc Belzile'[marc.a.belzile@tc.gc.ca]; 'mark paxton'[mpaxton@ganassi.com]; McCarthy, Chris (C.)[CMCCAR61@ford.com]; 'Meyer, Norm'[norm.meyer@tc.gc.ca]; mike.timmerman@horiba.com[mike.timmerman@horiba.com]; Okawa, Naoyasu (N.)[okawa.n@mazda.co.jp]; Peabody, Jason (J.A.){[jpeabod6@ford.com]; 'Peter Z. Janosi'[peter.janosi@roush.com]; 'RMiller@hatci.com'['RMiller@hatci.com']; 'Roxanne Loeffler'[rloeffler@sae.org]; 'Schlueter, Hannah (EASZ/1)'[hannah.schlueter@volkswagen.de]; sconrad@hatci.com [sconrad@hatci.com]; 'snyder.jim@epa.gov'['snyder.jim@epa.gov']; Steve Karamihas[stevemk@umich.edu]; steve.baldus@gm.com[steve.baldus@gm.com]; 'Suanne.Thomas@vw.com'[Suanne.Thomas@vw.com]; 'tom.beierschmitt@tema.toyota.com'[tom.beierschmitt@tema.toyota.com]; 'tommy\_chang@ahm.honda.com'[tommy\_chang@ahm.honda.com]; 'Vineet Mehta'[vineet@teslamotors.com]; William Beggs <william.beggs@gm.com>[william.beggs@gm.com]; Ott, William[ott.william@epa.gov]; william.meschievitz@tema.toyota.com[william.meschievitz@tema.toyota.com]; Wright, DavidA[Wright.DavidA@epa.gov]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Yuhasse, Nicole (L.){[nyuhase@ford.com]  
**Cc:** 'Foor Jeff (FCA)'[jeff.foor@fcagroup.com]; 'Tommy\_Chang@ahm.honda.com'[Tommy\_Chang@ahm.honda.com]; Tom Beierschmitt (TEMA TTC){[tom.beierschmitt@tema.toyota.com]; Nikeus, Jill (J.N.){[jill.nikeus@volvocars.com]}  
**From:** Glodich, Jeffrey (J.M.)  
**Sent:** Mon 5/4/2015 5:27:37 PM  
**Subject:** SAE LDVP Agenda 5-7-15  
Agenda - Light Duty Vehicle Performance Measurement Standards Committee - 5\_7\_2015.doc

Agenda for Thursday attached.

Jeff



## AGENDA

### Light-Duty Vehicle Performance Measurement Standards Committee

Chair – Jeff Glodich

Secretary – Nicole Yuhase

Thursday, May 7<sup>th</sup>, 2015

1:00-3:00 PM

Toyota Technical Center, Ann Arbor  
(Building 1555, 1555 Woodridge)

#### Web Meeting:

<https://www.connectmeeting.att.com>

**Ex. 6**

1. Welcome and Introductions
2. Membership Review
3. Document Review

#### J2263: "Road Load Measurement Using Onboard Anemometry and Coastdown Techniques"

- Sponsor: Tom Beierschmitt
- Continue document review

#### J1634: "Electric Vehicle Energy Consumption and Range Test Procedure"

- Sponsor: Jeff Glodich
- 65 vs 55MPH CSC<sub>M</sub>
- Revise 5-cycle sequences in Appendix A (5-cycle sequences 5-4-15.xls, uploaded)
- Questions on Tesla Proposal

#### J3066: "On-Board Fuel Consumption and Measurement Reporting Standard"

- Sponsor: David Wright
- Subcommittee status

#### 4. Other Business

#### NEXT MEETING

- 5/28 (proposed)

**Anti-Trust Statement:** In discharging their responsibilities, members of the Technical Standards Board, Councils/Division, and Technical Committees function as individuals and not as agents or representatives of any organization with which they may be associated, except that government employees participate in accordance with governmental regulations. Members are appointed to SAE Technical Committees on the basis of their individual qualifications which enable them to contribute to the work of the Committee.

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**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Mon 4/27/2015 1:49:56 PM  
**Subject:** High Altitude

Hi Jim,

I'll be at EPA today from 1 pm on and on Wednesday from 12:30 pm on.

I was wondering if you'll have a couple of minutes to meet because I have a few questions about the IUPV High Altitude testing.

Please let me know.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Glas, Tobias  
**Sent:** Monday, April 27, 2015 9:29 AM  
**To:** 'Sohacki, Lynn'  
**Subject:** RE: [REDACTED]

**Ex. 4 - CBI**

Hi Lynn,

Here are the [Ex. 4 - CBI] for the two cars. We will be at EPA today at 1 pm to inspect the first car.

Best regards

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Sohacki, Lynn [mailto:[sohacki.lynn@epa.gov](mailto:sohacki.lynn@epa.gov)]

**Sent:** Tuesday, April 21, 2015 9:37 AM

**To:** Glas, Tobias

**Subject:** Ex. 4 - CBI

Hi, Tobias.

The following vehicle will be brought in next week:

Ex. 4 - CBI

up on 4/27/15 (Monday)

Ex. 4 - CBI

up on 4/29/15 (Wednesday)

Please fill the attached parameter sheet (including the new second tab) and return it to me. When including instructions for disabling traction control, please include a description and location of the icon.

Thanks,

Lynn Sohacki

EPA, Compliance Division

734-214-4851

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Allen, Gregory (EEO)  
**Sent:** Tue 4/21/2015 8:27:32 PM  
**Subject:** Audi [Ex. 4 - CBI] Request

Hello Jim,

As discussed, here is the file name that the request for approval was uploaded to Verify under:

**Ex. 4 - CBI**

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Mon 4/20/2015 4:38:50 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

I have submitted test information and a decision request for the vehicles listed below. Both

**Ex. 4 - CBI**

Vehicle ID: Ex. 4 - CBI

Configuration: Ex. 4 - CBI

Vehicle ID: Ex. 4 - CBI

Configuration: Ex. 4 - CBI

**Ex. 4 - CBI**

Please inform us of your decision as soon as possible.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Mon 4/20/2015 3:04:41 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

I have submitted test information and a decision request for the vehicles listed below. Both

Ex. 4 - CBI

Vehicle ID: Ex. 4 - CBI

Configuration: Ex. 4 - CBI

Vehicle ID: Ex. 4 - CBI

Configuration: Ex. 4 - CBI

**Ex. 4 - CBI**

Please inform us of your decision as soon as possible.

Fyi - I will be uploading test information and decision requests for the Ex. 4 - CBI this afternoon.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Fri 4/17/2015 7:43:39 PM  
**Subject:**  **Ex. 4 - CBI**

Hello Jim,

I have submitted test information and a decision request for the vehicle listed below.

Vehicle ID: **Ex. 4 - CBI**

Configuration:  **Ex. 4 - CBI**

**Ex. 4 - CBI**

Please inform us of your decision as soon as possible.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Thur 4/9/2015 5:29:57 PM  
**Subject:** RE: [REDACTED] **Ex. 4 - CBI**

Hello Jim,

As a side note:

[REDACTED] **Ex. 4 - CBI**

[REDACTED] **Ex. 4 - CBI**

I explained this in the “Comments” section in the Verify decision information as well.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Allen, Gregory (EEO)  
**Sent:** Thursday, April 09, 2015 1:24 PM  
**To:** snyder.jim@epa.gov  
**Cc:** Rodgers, William (EEO); Giles, Michael (EEO)  
**Subject:** [REDACTED] **Ex. 4 - CBI**

Hello Jim,

I have submitted test information and a decision request for the vehicles listed below.

Vehicle ID: **Ex. 4 - CBI**

Configuration: **Ex. 4 - CBI**

Configuration: **Ex. 4 - CBI**

**Ex. 4 - CBI**

Please inform us of your decision as soon as possible.

Thanks Jim.

Best Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Thur 4/9/2015 5:24:23 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

I have submitted test information and a decision request for the vehicles listed below.

Vehicle ID: Ex. 4 - CBI

Configuration: Ex. 4 - CBI

Configuration: Ex. 4 - CBI

**Ex. 4 - CBI**

Please inform us of your decision as soon as possible.

Thanks Jim.

Best Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Allen, Gregory (EEO)  
**Sent:** Mon 4/6/2015 8:40:11 PM  
**Subject:** RE: [REDACTED]

**Ex. 4 - CBI**

Hello Jim,

Thanks for your help on this.

**Ex. 4 - CBI**

Please let me know if you have any further questions.

[REDACTED] **Ex. 4 - CBI**

[REDACTED] **Ex. 4 - CBI**

Thanks Jim

Best Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Monday, April 06, 2015 3:37 PM  
**To:** Allen, Gregory (EEO)  
**Subject:** RE: [REDACTED]

**Ex. 4 - CBI**

Thanks for sorting that out.

**Ex. 4 - CBI**

Jim

**From:** Allen, Gregory (EEO) [<mailto:Gregory.Allen@vw.com>]  
**Sent:** Monday, April 06, 2015 2:59 PM  
**To:** Snyder, Jim  
**Subject:** **Ex. 4 - CBI**

Hello Jim,

**Ex. 4 - CBI**

**Ex. 4 - CBI**

**Ex. 4 - CBI**

**Ex. 4 - CBI**

Please give me a call if you have any questions.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [redacted] Ex. 7 [redacted]@vw.com]; [redacted] Ex. 7  
[redacted] Ex. 7 [redacted]@vw.com]  
**From:** [redacted] Ex. 7  
**Sent:** Wed 4/1/2015 7:51:59 PM  
**Subject:** Request for Approval - [redacted] **Ex. 4 - CBI**  
**Ex. 4 - CBI**

Hello Jim,

Today I uploaded a request for approval / presentation for the **Ex. 4 - CBI**  
[redacted] **Ex. 4 - CBI**. The file was also uploaded to Verify with the file name:  
[redacted] **Ex. 4 - CBI** I have also attached the presentation for your convenience.

**Ex. 4 - CBI**

If you have any questions/concerns please let us know.

Best Regards,

**Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Mon 3/30/2015 2:48:17 PM  
**Subject:** VW Group **Ex. 4 - CBI**

Hello Jim,

I have submitted **Ex. 4 - CBI** for the vehicles listed below.

Vehicle ID: **Ex. 4 - CBI**

Configuration: **Ex. 4 - CBI**  
**Ex. 4 - CBI**

Configuration: **Ex. 4 - CBI**

Configuration: **Ex. 4 - CBI**

**Ex. 4 - CBI**

Configuration 0 : **Ex. 4 - CBI**

Configuration 1 : **Ex. 4 - CBI**

Configuration 2 : **Ex. 4 - CBI**

Please inform us of your decision as soon as possible.

Thank You and Best Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]; Thomas, Suanne (EEO)[Suanne.Thomas@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Mon 3/30/2015 1:15:03 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

I have submitted Ex. 4 - CBI for the vehicles listed below.

Vehicle ID: Ex. 4 - CBI

Configuration: Ex. 4 - CBI

Configuration: Ex. 4 - CBI

## Ex. 4 - CBI

Please inform of us your decision as soon as possible.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Fri 3/27/2015 6:30:32 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

Today I uploaded Ex. 4 - CBI for the vehicle listed below.

Vehicle ID: Ex. 4 - CBI

Configuration: Ex. 4 - CBI

**Ex. 4 - CBI**

Please inform of us your decision as soon as possible.

Thanks and have a good weekend!

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Thur. 3/26/2015 5:34:02 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

Today I uploaded Ex. 4 - CBI for the vehicle listed below.

Vehicle ID: Ex. 4 - CBI

Configuration Ex. 4 - CBI

**Ex. 4 - CBI**

Please inform of us your decision as soon as possible.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Allen, Gregory (EEO)  
**Sent:** Wed 3/25/2015 3:31:04 PM  
**Subject:** Ex. 4 - CBI

Hello Jim,

This morning Ex. 4 - CBI Ex. 4 - CBI  
Please review the documents at  
your earliest convenience and let us know of any questions/concerns.

Kind Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** 'ball.joel@epa.gov'['ball.joel@epa.gov']; Beierschmitt, Thomas (T.A. )[tbeiers1@ford.com]; 'Berg, Olle ()'[olle.berg@volvocars.com]; 'Bob Maxwell'[remaxwell@comcast.net]; brian.mace@horiba.com[brian.mace@horiba.com]; Buller, Patrick[patrick.buller@volvocars.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Christopher J Twarog [christopher.twarog@gm.com]; david.woods@chrysler.com[david.woods@chrysler.com]; 'Dennis Pawlak'[Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid'[Douglas.Reid@na.mitsubishi-motors.com]; Dr. Robert Otto Rasmussen, PE [Robotto@TheTranstecGroup.com]; 'Duoba, Mike'[mduoba@anl.gov]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; guanghui.cai@gm.com[guanghui.cai@gm.com]; 'Jeff Foor'[jdf14@chrysler.com]; Jenny.Sigelko@vw.com[Jenny.Sigelko@vw.com]; JNIKEUS@volvocars.com[JNIKEUS@volvocars.com]; 'Keith Thompson'[Keith.Thompson@bepco.com]; kyle.bedsole@gm.com[kyle.bedsole@gm.com]; 'Mahmoud Yassine'[mky@chrysler.com]; 'Marc Belzile'[marc.a.belzile@tc.gc.ca]; 'mark paxton'[mpaxton@ganassi.com]; Mccarthy, Chris (C.)[CMCCAR61@ford.com]; 'Meyer, Norm'[norm.meyer@tc.gc.ca]; mike.timmerman@horiba.com[mike.timmerman@horiba.com]; Okawa, Naoyasu (N.)[okawa.n@mazda.co.jp]; Peabody, Jason (J.A.)[jpeabod6@ford.com]; 'Peter Z. Janosi'[peter.janosi@roush.com]; 'RMiller@hatci.com'['RMiller@hatci.com']; 'Roxanne Loeffler'[rloeffler@sae.org]; 'Schlueter, Hannah (EASZ/1)'[hannah.schlueter@volkswagen.de]; sconrad@hatci.com [sconrad@hatci.com]; 'snyder.jim@epa.gov'['snyder.jim@epa.gov']; Steve Karamihas[stevemk@umich.edu]; steve.baldus@gm.com[steve.baldus@gm.com]; Suanne.Thomas@vw.com[Suanne.Thomas@vw.com]; 'tom.beierschmitt@tema.toyota.com'['tom.beierschmitt@tema.toyota.com']; 'tommy\_chang@ahm.honda.com'['tommy\_chang@ahm.honda.com']; Vineet Mehta[vineet@teslamotors.com]; William Beggs <william.beggs@gm.com>[william.beggs@gm.com]; Ott, William[ott.william@epa.gov]; william.meschievitz@tema.toyota.com[william.meschievitz@tema.toyota.com]; Wright, DavidA[Wright.DavidA@epa.gov]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Yuhase, Nicole (L.)[nyuhase@ford.com]

**From:** Glodich, Jeffrey (J.M.)  
**Sent:** Tue 3/24/2015 2:58:32 PM  
**Subject:** Agenda - Light Duty Vehicle Performance Measurement Standards Committee - 3\_26\_2015.doc  
[Agenda - Light Duty Vehicle Performance Measurement Standards Committee - 3\\_26\\_2015.doc](#)

Agenda for Thursday attached.

Jeff

**Jeff Glodich**

Ford Motor Company  
Vehicle Environmental Regulatory Strategy and Planning  
217-E4 WHQ  
(313) 845-1579

## **AGENDA**

### **Light-Duty Vehicle Performance Measurement Standards Committee**

**Chair – Jeff Glodich**

**Secretary – Nicole Yuhase**

**Thursday, March 26<sup>th</sup>, 2015**

**1:00-3:00 PM**

**Toyota Technical Center, Ann Arbor  
(Building 1555, 1555 Woodridge)**

**Web Meeting:**

<https://www.connectmeeting.att.com>

### **Ex. 6**

- 1. Welcome and Introductions**
- 2. Membership Review**
- 3. Document Review**

#### **J2263: "Road Load Measurement Using Onboard Anemometry and Coastdown Techniques"**

- Sponsor: Tom Beierschmitt
- Review sections updated with Guidance language
- Continue document review

#### **J1634: "Electric Vehicle Energy Consumption and Range Test Procedure"**

- Sponsor: Jeff Glodich
- Finalize plan for 5-cycle appendix

#### **J3066: "On-Board Fuel Consumption and Measurement Reporting Standard"**

- Sponsor: David Wright
- Subcommittee status

#### **4. Other Business**

#### **NEXT MEETING**

- 4/30 (proposed)

**Anti-Trust Statement:** In discharging their responsibilities, members of the Technical Standards Board, Councils/Division, and Technical Committees function as individuals and not as agents or representatives of any organization with which they may be associated, except that government employees participate in accordance with governmental regulations. Members are appointed to SAE Technical Committees on the basis of their individual qualifications which enable them to contribute to the work of the Committee.

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As a participant in SAE Technical Committees, individuals agree that the collective work of the committee(s) is the property of SAE, and SAE is charged with its publication, dissemination, and protection.

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Wed 3/11/2015 5:54:05 PM  
**Subject:** RE: **Ex. 4 - CBI** Follow up

Great thanks.

Bill

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Wednesday, March 11, 2015 1:53 PM  
**To:** Rodgers, William (EEO)  
**Cc:** Giles, Michael (EEO)  
**Subject:** RE: **Ex. 4 - CBI** Follow up

Yes I see it in the queue. There was another request ahead of it but I completed that one. I will try to get through it by end of Thursday.

Jim

**From:** Rodgers, William (EEO) [mailto:William.Rodgers@vw.com]  
**Sent:** Wednesday, March 11, 2015 1:34 PM  
**To:** Snyder, Jim  
**Cc:** Giles, Michael (EEO)  
**Subject:** **Ex. 4 - CBI** Follow up

Hi Jim,

As follow up to my phone message, can you give us an update on the status of the following

**Ex. 4 - CBI**

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**To:** [REDACTED] **Ex. 7** @vw.com  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]; [REDACTED] **Ex. 7** @vw.com [REDACTED] **Ex. 7**  
**From:** Wehrly, Linc  
**Sent:** Wed 3/11/2015 12:20:14 PM  
**Subject:** RE: Volkswagen **Ex. 4 - CBI**

[REDACTED] **Ex. 7** [REDACTED]

Thanks for the follow-up. I think we need an explanation of the technologies

[REDACTED] **Ex. 4 - CBI**

**Ex. 4 - CBI**

**Ex. 4 - CBI**

I think something similar to the descriptions you provided in the presentation materials for the February 5, 2015 meeting should be good.

Thanks,

Linc

Linc Wehrly

Director, Light-Duty Vehicle Center

Compliance Division

Office of Transportation and Air Quality

United States Environmental Protection Agency

(734) 214-4286

wehrly.linc@epa.gov

**From:** [REDACTED] **Ex. 7** @vw.com  
**Sent:** Tuesday, March 10, 2015 5:48 PM  
**To:** Wehrly, Linc  
**Cc:** Snyder, Jim [REDACTED] **Ex. 7** [REDACTED]

**Subject:** Volkswagen

**Ex. 4 - CBI**

Hello Linc:

I have re-checked the information sent to you regarding Volkswagen's

**Ex. 4 - CBI**

**Ex. 4 - CBI**

**Ex. 4 - CBI**

Best regards,

**Ex. 7**

**Ex. 7**

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: [REDACTED] **Ex. 7**

Cell: [REDACTED] **Ex. 7**

Fax: [REDACTED] **Ex. 7**

E-Mail: [REDACTED] **Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [redacted] Ex. 7 [redacted] @vw.com; [redacted] Ex. 7  
[redacted] Ex. 7 [redacted] @vw.com]  
**From:** [redacted] Ex. 7  
**Sent:** Mon 3/9/2015 9:51:24 PM  
**Subject:** RE: Volkswagen Submittals

Hello Jim:

Thanks for the response on these items.

Best regards,

[redacted] Ex. 7

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Monday, March 09, 2015 5:28 PM  
**To:** [redacted] Ex. 7  
**Cc:** [redacted]  
**Subject:** RE: Volkswagen Submittals

Gentleman, attached are the approved or reviewed documents. I still have to review the [redacted] Ex. 7

[redacted]  
Ex. 7

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** [REDACTED] **Ex. 7** **[REDACTED]@vw.com]**  
**Sent:** Wednesday, March 04, 2015 10:02 AM  
**To:** Snyder, Jim  
**Cc:** [REDACTED] **Ex. 7** [REDACTED]  
**Subject:** Volkswagen Submittals

Hello Jim:

This morning we spoke about three requests sent to EPA. I wanted to inquire about the status. It turns out that all three requests were sent to you by e-mail from [REDACTED] **Ex. 7** [REDACTED]. The topics are as follows:

**Ex. 7**

Best regards,

**Ex. 7**

**Ex. 7**

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone:

Cell: (

Fax: (

E-Mail:

**Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Allen, Gregory (EEO)  
**Sent:** Mon 3/9/2015 9:29:14 PM  
**Subject:** Automatic reply: Volkswagen Submittals

I am currently out of the office on business until Monday, March 16.

I will be responding to e-mails as usual, but please expect a slight delay in my response. I can also be reached at the cell # listed in Vinnie.

Thank You.

Best Regards,

Greg Allen

VWGoA EEO

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Giles, Michael (EEO)[michael.giles@vw.com]; Allen, Gregory (EEO)[Gregory.Allen@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Thur 3/5/2015 1:10:03 PM  
**Subject:** RE: Initial Application [Ex. 4 - CBI]

Ok let try again.

[Ex. 4 - CBI]

**Ex. 4 - CBI**

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**From:** Rodgers, William (EEO)  
**Sent:** Wednesday, March 04, 2015 11:11 AM  
**To:** "Jim Snyder" (Snyder.Jim@epamail.epa.gov)  
**Cc:** Giles, Michael; Allen, Gregory (EEO)  
**Subject:** FW: Initial Application [Ex. 4 - CBI]

Hi Jim,

**Ex. 4 - CBI**

Thanks,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**From:** Rodgers, William (EEO)  
**Sent:** Tuesday, March 03, 2015 10:02 AM  
**To:** "Jim Snyder" ([Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov))  
**Cc:** Giles, Michael; Allen, Gregory (EEO)  
**Subject:** Initial Application

**Ex. 4 - CBI**

Hello Jim,

**Ex. 4 - CBI**

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Thur 3/5/2015 12:54:11 PM  
**Subject:** RE: Initial Application

**Ex. 4 - CBI**

Thanks Jim.

I did see your message and confirmed that it was a typo. The sentence should reference Figure 6, not Table 6.

I will upload a revision this morning.

Regards,

Bill

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Wednesday, March 04, 2015 5:24 PM  
**To:** Rodgers, William (EEO)  
**Subject:** RE: Initial Application for

**Ex. 4 - CBI**

Done.

Bill, did you see my note about the missing table 3 missing or is that a typo?

**Ex. 4 - CBI**

Is there a table

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Rodgers, William (EEO) [mailto:[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)]  
**Sent:** Wednesday, March 04, 2015 11:11 AM  
**To:** Snyder, Jim  
**Cc:** Giles, Michael (EEO); Allen, Gregory (EEO)  
**Subject:** FW: Initial Application for

**Ex. 4 - CBI**

Hi Jim,

**Ex. 4 - CBI**

Thanks,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**From:** Rodgers, William (EEO)  
**Sent:** Tuesday, March 03, 2015 10:02 AM  
**To:** "Jim Snyder" ([Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov))  
**Cc:** Giles, Michael; Allen, Gregory (EEO)  
**Subject:** Initial Application for

**Ex. 4 - CBI**

Hello Jim,

**Ex. 4 - CBI**

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**To:** Wehrly, Linc[wehrly.linc@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Ex. 7 (EEO) Ex. 7 @vw.com; Ex. 7  
(EEO) Ex. 7 @vw.com Ex. 7 (EEO) Ex. 7 @vw.com  
**From:** Ex. 7 (EEO)  
**Sent:** Tue 2/24/2015 2:01:11 PM  
**Subject:** Volkswagen Group Applications for Off-Cycle Technology GHG Credits

Hello Linc and Jim:

Linc – You will recall from our telephone conversation last week that we agreed to provide the 2012 and 2013 Volkswagen Group Off-Cycle Technology GHG Credit Applications as a hard copy.

I wish to inform both of you that I have sent the information via express delivery last Thursday, February 20, 2015. Included are four documents:

1. 2012 Model Year Volkswagen Group Off-Cycle Technology Credit Application with confidential information removed .
2. 2012 Model Year Volkswagen Group Off-Cycle Technology Credit Application including confidential information.
3. 2013 Model Year Volkswagen Group Off-Cycle Technology Credit Application with confidential information removed.
4. 2013 Model Year Volkswagen Group Off-Cycle Technology Credit Application including confidential information.

For those documents containing confidential information, the selected confidential information on a given page is marked (usually in a shaded cell). If an entire page is confidential, it is marked at the bottom of the page. As we also discussed, Volkswagen opted to include credit applications for start-stop technology. If it appears that review of this feature will hamper the progress of the review, please let us know.

Best regards,

**Ex. 7**

---

**Ex. 7**

**Ex. 7**

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: **Ex. 7**

Cell: **Ex. 7**

Fax: **Ex. 7**

E-Mail: **Ex. 7**

**From:** Giles, Michael (EEO)  
**Location:** AA-Room-Office-N95-ConfRoom-AAOTAQ-Office  
**Importance:** Normal  
**Subject:** Accepted: VW MTG: Off Cycle and A/C Credits  
**Start Date/Time:** Thur 2/5/2015 6:00:00 PM  
**End Date/Time:** Thur 2/5/2015 7:30:00 PM

;

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [REDACTED] Ex. 7 [REDACTED] @vw.com]; [REDACTED] Ex. 7 [REDACTED] @vw.com;  
[REDACTED] Ex. 7 [REDACTED] @vw.com]; [REDACTED] Ex. 7 [REDACTED] @vw.com  
**From:** [REDACTED] Ex. 7 [REDACTED] (EEO)  
**Sent:** Mon 12/8/2014 4:49:26 PM  
**Subject:** 2016 Audi Certification Request

Hello Jim,

As the result of the recent EPA confirmatory testing related to the 2016 Audi A6, test vehicle GNU4-CAQ configuration 01, we have chosen not to use the calibration or test data to represent this model. We will instead carry over the previous (2015) model year calibration effective with the start of 2016 model year production for this model.

We have submitted an Application for Emissions Certification (revision 2) and Certification Request in the Verify system for the related test group GVG AJ03.0NU4.

Please let me know if you have any questions regarding this request.

Regards,

[REDACTED] Ex. 7 [REDACTED]

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

[REDACTED] Ex. 7 [REDACTED]

[REDACTED] Ex. 7 [REDACTED]

**To:** Wright, DavidA[Wright.DavidA@epa.gov];  
Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller,  
Patrick[patrick.buller@volvocars.com]; Mccarthy, Chris (C. )[CMCCAR61@ford.com];  
sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA  
TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com];  
dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com];  
douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina,  
Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey  
(J.M.)[jglodich@ford.com]; Beggs, William S.[william.beggs@gm.com]; Ryan  
McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com];  
nokawa@mazdausa.com[nokawa@mazdausa.com]; rloeffler@sae.org[rloeffler@sae.org]; Yuhase, Nicole  
(L. )[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Bowu  
Reed[bowu.reed@na.mitsubishi-motors.com]

**From:** Duoba, Michael J.

**Sent:** Thur 1/8/2015 6:35:15 PM

**Subject:** RE: J3066 Task Force January 8th Meeting Notice and Agenda are posted on the SAE  
standards works website now

Taken just this morning...

	Vehicle FE	Bag FE	Modal FE	Fuel Scale FE	Vehicle Dist	Dyno DAQ Dist	fuel scale	bag
UDDS 1	60.4	61.54	61.99	59.94	7.4	7.461	-0.8%	1.9%
UDDS 2	67.1	67.56	68.3	66.72	7.4	7.445	-0.6%	0.7%
UDDS 3	67.4	67.73	68.57	66.94	7.4	7.486	-0.7%	0.5%
UDDS 1+2+3	64.8	65.48	66.14	64.36	22.3	22.392	-0.7%	1.0%
Hwy 1+2	63	64.18	63.90	62.13	20.5	20.5287	-1.4%	1.8%
US06 1	37.6	39.2	NA	37.95	7.9	8.0091	0.9%	4.1%
US06 2	42.2	43.61	NA	42.15	7.9	7.9994	-0.1%	3.2%
US06 1+2	39.7	41.29	NA	39.94	15.9	16.0085	0.6%	3.8%

**From:** Wright, DavidA [mailto:Wright.DavidA@epa.gov]

**Sent:** Wednesday, January 07, 2015 3:59 PM

**To:** Tommy\_Chang@ahm.honda.com; Buller, Patrick; Mccarthy, Chris (C. );  
sconrad@hatci.com; Tom Beierschmitt (TEMA TTC); mky@chrysler.com;  
dennis.pawlak@na.mitsubishi-motors.com; douglas.reid@na.mitsubishi-motors.com; Paulina,  
Carl; Chris Nevers; Glodich, Jeffrey (J.M.); Beggs, William S.; Ryan McGavock; Sigelko, Jenny  
(EEO); nokawa@mazdausa.com; Duoba, Michael J.; rloeffler@sae.org; Yuhase, Nicole (L. );  
yosuke\_sato@ahm.honda.com; Bowu Reed

**Subject:** J3066 Task Force January 8th Meeting Notice and Agenda are posted on the SAE  
standards works website now

The meeting notice with the webex information and the conference call numbers is also attached.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)

	Vehicle FE	Bag FE	Modal FE	Fuel Scale FE	Vehicle Dist	Dyno DAQ Dist	fuel scale	bag	
UDDS 1	60.4	61.54	61.99	59.94	7.4	7.461	-0.8%	1.9%	
UDDS 2	67.1	67.56	68.3	66.72	7.4	7.445	-0.6%	0.7%	
UDDS 3	67.4	67.73	68.57	66.94	7.4	7.486	-0.7%	0.5%	
UDDS 1+2+3	64.8	65.48	66.14	64.36	22.3	22.392	-0.7%	1.0%	
Hwy 1+2	63	64.18	63.90	62.13	20.5	20.5287	-1.4%	1.8%	
US06 1	37.6	39.2	NA	37.95	7.9	8.0091	0.9%	4.1%	
US06 2	42.2	43.61	NA	42.15	7.9	7.9994	-0.1%	3.2%	
US06 1+2	39.7	41.29	NA	39.94	15.9	16.0085	0.6%	3.8%	

**To:** Glodich, Jeffrey (J.M.)[jglodich@ford.com]; andrew.ramos@gm.com[andrew.ramos@gm.com]; 'ball.joel@epa.gov'[ball.joel@epa.gov]; Beierschmitt, Thomas (T.A.){tbeiers1@ford.com}; 'Berg, Olle ()'[olle.berg@volvocars.com]; 'Bob Maxwell'[remaxwell@comcast.net]; brian.mace@horiba.com[brian.mace@horiba.com]; Buller, Patrick[patrick.buller@volvocars.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; 'chris.mccarthy@gm.com'{chris.mccarthy@gm.com}; david.woods@chrysler.com[david.woods@chrysler.com]; 'Dennis Pawlak'[Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid'[Douglas.Reid@na.mitsubishi-motors.com]; Dr. Robert Otto Rasmussen, PE [Robotto@TheTranstecGroup.com]; 'Duoba, Mike'[mduoba@anl.gov]; 'Jeff Foor'[jdf14@chrysler.com]; Jenny.Sigelko@vw.com[Jenny.Sigelko@vw.com]; JNIKEUS@volvocars.com[JNIKEUS@volvocars.com]; 'Keith Thompson'[Keith.Thompson@bepco.com]; kyle.bedsole@gm.com[kyle.bedsole@gm.com]; 'Mahmoud Yassine'[mky@chrysler.com]; 'Marc Belzile'[marc.a.belzile@tc.gc.ca]; 'mark paxton'[mpaxton@ganassi.com]; 'Meyer, Norm'[norm.meyer@tc.gc.ca]; mike.timmerman@horiba.com[mike.timmerman@horiba.com]; Okawa, Naoyasu (N.)[okawa.n@mazda.co.jp]; Peabody, Jason (J.A.){jpeabod6@ford.com}; 'Peter Z. Janosi'[peter.janosi@roush.com]; 'RMiller@hatci.com'{RMiller@hatci.com}; 'Roxanne Loeffler'[rloeffler@sae.org]; 'Schlueter, Hannah (EASZ/1)'[hannah.schlueter@volkswagen.de]; sconrad@hatci.com [sconrad@hatci.com]; 'snyder.jim@epa.gov'{snyder.jim@epa.gov}; Steve Karamihas[stevemk@umich.edu]; steve.baldus@gm.com[steve.baldus@gm.com]; Suanne.Thomas@vw.com[Suanne.Thomas@vw.com]; 'tom.beierschmitt@tema.toyota.com'{tom.beierschmitt@tema.toyota.com}; 'tommy\_chang@ahm.honda.com'{tommy\_chang@ahm.honda.com}; Vineet Mehta[vineet@teslamotors.com]; William Beggs <william.beggs@gm.com>[william.beggs@gm.com]; Ott, William[ott.william@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Yuhase, Nicole (L.){nyuhase@ford.com}

**From:** Will Meschievitz (TEMA TTC)  
**Sent:** Thur 12/11/2014 5:59:44 PM  
**Subject:** last minute change for access code

Sorry. Technical difficulties.

Call in number is same Non-Responsive

But access code is different

Non-Responsive

**From:** Glodich, Jeffrey (J.M.) [mailto:jglodich@ford.com]  
**Sent:** Wednesday, November 12, 2014 3:20 PM  
**To:** andrew.ramos@gm.com; 'ball.joel@epa.gov'; Beierschmitt, Thomas (T.A.); 'Berg, Olle ()'; 'Bob Maxwell'; brian.mace@horiba.com; Buller, Patrick; 'Carl Paulina'; Chris Nevers; 'chris.mccarthy@gm.com'; david.woods@chrysler.com; 'Dennis Pawlak'; 'Douglas Reid'; Dr. Robert Otto Rasmussen, PE ; 'Duoba, Mike'; 'Jeff Foor'; Jenny.Sigelko@vw.com; JNIKEUS@volvocars.com; 'Keith Thompson'; kyle.bedsole@gm.com; 'Mahmoud Yassine'; 'Marc Belzile'; 'mark paxton'; 'Meyer, Norm'; mike.timmerman@horiba.com; Okawa, Naoyasu (N.); Peabody, Jason (J.A.); 'Peter Z. Janosi'; 'RMiller@hatci.com'; 'Roxanne Loeffler'; 'Schlueter, Hannah (EASZ/1)'; sconrad@hatci.com ;

'snyder.jim@epa.gov'; Steve Karamihas; steve.baldus@gm.com; Suanne.Thomas@vw.com; 'tom.beierschmitt@tema.toyota.com'; 'tommy\_chang@ahm.honda.com'; Vineet Mehta; William Beggs <william.beggs@gm.com>; 'William Ott'; Wright, DavidA; yosuke\_sato@ahm.honda.com; Yuhase, Nicole (L.)

**Subject:** SAE LDVP Committee Agenda 11-13-14

Updated agenda attached.

---

**From:** Glodich, Jeffrey (J.M.)

**Sent:** Wednesday, November 12, 2014 2:45 PM

**To:** [andrew.ramos@gm.com](mailto:andrew.ramos@gm.com); [ball.joel@epa.gov](mailto:ball.joel@epa.gov); Beierschmitt, Thomas (T.A.); 'Berg, Olle ()'; 'Bob Maxwell'; [brian.mace@horiba.com](mailto:brian.mace@horiba.com); 'Buller, Patrick'; 'Carl Paulina'; Chris Nevers; 'chris.mccarthy@gm.com'; 'david.woods@chrysler.com'; 'Dennis Pawlak'; 'Douglas Reid'; Dr. Robert Otto Rasmussen, PE ; 'Duoba, Mike'; Glodich, Jeffrey (J.M.); 'Jeff Foor'; 'Jenny.Sigelko@vw.com'; 'JNIKEUS@volvocars.com'; 'Keith Thompson'; [kyle.bedsole@gm.com](mailto:kyle.bedsole@gm.com); 'Mahmoud Yassine'; 'Marc Belzile'; 'mark paxton'; 'Meyer, Norm'; [mike.timmerman@horiba.com](mailto:mike.timmerman@horiba.com); Okawa, Naoyasu (N.); Peabody, Jason (J.A.); 'Peter Z. Janosi'; 'RMiller@hatci.com'; 'Roxanne Loeffler'; 'Schlueter, Hannah (EASZ/1)'; [sconrad@hatci.com](mailto:sconrad@hatci.com) ; 'snyder.jim@epa.gov'; Steve Karamihas; [steve.baldus@gm.com](mailto:steve.baldus@gm.com); 'Suanne.Thomas@vw.com'; 'tom.beierschmitt@tema.toyota.com'; 'tommy\_chang@ahm.honda.com'; 'Vineet Mehta'; William Beggs ; 'William Ott'; Wright, DavidA; [yosuke\\_sato@ahm.honda.com](mailto:yosuke_sato@ahm.honda.com); Yuhase, Nicole (L.)

**Subject:** SAE LDVP Committee Agenda 11-12-14

Agenda for tomorrow attached.

<< File: Agenda - Light Duty Vehicle Performance Measurement Standards Committee - 11\_13\_2014.doc >>

**Jeff Glodich**

Ford Motor Company  
Vehicle Environmental Regulatory Strategy and Planning  
217-E4 WHQ  
(313) 845-1579

**To:** Wright, DavidA[Wright.DavidA@epa.gov]  
**From:** Sigelko, Jenny (EEO)  
**Sent:** Wed 10/15/2014 12:57:29 PM  
**Subject:** RE: SAE J3066 Volumetric Fuel Calculation Methodology  
fuel economy display validation test\_jys.docx

Hi David,

## Ex. 4 - CBI

Thanks very much.

Jcnnny

Jenny Sigelko

Volkswagen Group of America

EEO-Auburn Hills MI

248 754 4214

[Jenny.Sigelko@VW.com](mailto:Jenny.Sigelko@VW.com)

**From:** Wright, DavidA [mailto:[Wright.DavidA@epa.gov](mailto:Wright.DavidA@epa.gov)]  
**Sent:** Tuesday, October 14, 2014 4:54 PM  
**To:** Tommy\_Chang@ahm.honda.com; Buller, Patrick; Chris McCarthy; sconrad@hatci.com; Tom Beierschmitt (TEMA TTC); mky@chrysler.com; dennis.pawlak@na.mitsubishi-motors.com; douglas.reid@na.mitsubishi-motors.com; Paulina, Carl; Chris Nevers; Glodich, Jeffrey (J.M.); William

Beggs; Ryan McGavock; Sigelko, Jenny (EEO); nokawa@mazdausa.com; Duoba, Michael J.; Yuhase, Nicole (L.); yosuke\_sato@ahm.honda.com; Ellies, Ben; Bowu Reed  
**Cc:** mark.a.theobald@gm.com  
**Subject:** SAE J3066 Volumetric Fuel Calculation Methodology

At the October 2 meeting of the J3066 the method for calculating the volumetric fuel economy (not correcting to the 1975 fuel parameters) was presented. The method is attached as Appendix A in the attached document. This calculation is needed to be described separately from the fuel economy equation in the Federal Register, as, the Federal Register listed calculation includes the weighting for the differences in fuel properties from the 1975 fuel.

Please review Appendix A and let me know if you have any corrections, questions, or comments. Also, the percent difference calculation currently does not have any correction to account for the differences in the specific gravity of the test fuel and the specific gravity used in the on-board calculation. The difference in the specific gravity between the actual test fuel and the valued used for the on-board calculation needs to be accounted in the percent difference calculation.

Thank you for your review. The next meeting of the J3066 task force is scheduled for November 6<sup>th</sup> at the EPA office on Traverwood.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)



# DRAFT

## FUEL ECONOMY DISPLAY CHASSIS DYNAMOMETER VALIDATION TESTING

### RATIONALE

This test method is used to determine the accuracy of the vehicle's fuel economy display. The vehicle information center's displayed average fuel economy is recorded at the conclusion of a chassis dynamometer test and then is compared to the carbon-balance fuel economy measured during the chassis dynamometer test.

### 2. REFERENCES

#### 2.1 CFR Publications

The CFR is available from the Superintendent of Documents, U.S. Government Printing Office, Mail Stop: SSOP, Washington, DC, 20402-9320, <http://www.gpoaccess.gov/cfr/index.html>.

40 CFR Part 86              Control of Emissions from New and In-Use Highway Vehicles and Engines

40 CFR Part 600              Fuel Economy and Greenhouse Gas Exhaust Emissions of Motor Vehicles

#### 2.2 ASTM Publications

ASTM publications are available from the American Society of Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, <http://www.astm.org>.

ASTM D 1298 Standard

ASTM D 3343 Standard

### 3. DEFINITIONS

### 4. CHASSIS DYNAMOMETER VALIDATION OF VEHICLE INFORMATION CENTER DISPLAYED AVERAGE FUEL ECONOMY

#### 4.1 Average Fuel Economy Display Validation Procedure – 75° FTP Test

Prior to beginning the 75° FTP exhaust emission test, reset the vehicle's average fuel economy display.

At the completion of the 75° FTP test, when the engine has been turned off at the conclusion of Phase 3, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for each bag of the 75° FTP test according to the methodology described in Appendix A.

Average the Bag 1, Bag 2, and Bag 3 volumetric fuel economy results using the following equation –

$$\text{Test Average MPG} = (\text{B1 dist} + \text{B2 dist} + \text{B3 dist}) / [(\text{B1 dist/B1 mpg}) + (\text{B2 dist/B2 mpg}) + (\text{B3 dist/B3 mpg})]$$

Where,

Test Average MPG = Calculated average volumetric MPG (not the hot/cold weighted value) observed during the 75° FTP test.

B1 dist, B2 dist, B3 dist = Measured distance travelled during the individual phases of the 75° FTP test.

# DRAFT

FTP test.

B1 mpg, B2 mpg, B3 mpg = Calculated volumetric fuel economy (see Appendix A) measured during the individual phases of the 75□ FTP test.

Determine the percent difference between the value recorded from the fuel economy display and the calculated 75□ FTP Test Average MPG –

Percent Difference = [(Display MPG – 75□ FTP Test Average MPG)/ 75□ FTP Test Average MPG] \* 100

## 4.2 Average Fuel Economy Display Validation Procedure – Highway Fuel Economy Test

Immediately prior to beginning the sampled portion of the highway fuel economy test (HFET), reset the vehicle's average fuel economy display.

At the completion of the highway fuel economy test, when the engine has been turned off at the conclusion test, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for the HFET test according to the methodology described in Appendix A.

Determine the percent difference between the value recorded from the fuel economy display and the carbon-balance calculated highway fuel economy test MPG –

Percent Difference = [(Display MPG – HFET MPG)/HFET MPG] \* 100

## 4.3 Average Fuel Economy Display Validation Procedure – US06 Test

Prior to beginning the US06 exhaust emission test, reset the vehicle's average fuel economy display.

At the completion of the US06 test, when the engine has been turned off at the conclusion of the test, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for the US06 test according to the methodology described in Appendix A. If a split bag US06 test is performed calculate the volumetric fuel economy for each bag of the test.

Average the Bag 1 and Bag 2 volumetric fuel economy results using the following equation –

$$\text{Test Average MPG} = (\text{B1 dist} + \text{B2 dist}) / [(\text{B1 dist}/\text{B1 mpg}) + (\text{B2 dist}/\text{B2 mpg})]$$

Where,

Test Average MPG = Calculated average MPG observed during the city and highway portions of the US06 test.

B1 dist and B2 dist = Measured distance travelled during the city and highway phases of the US06 test.

B1 mpg and B2 mpg = Calculated volumetric fuel economy measured during the city and highway phases of the US06 test.

Determine the percent difference between the value recorded from the fuel economy display and

# DRAFT

the calculated US06 Test Average MPG –

$$\text{Percent Difference} = [(\text{Display MPG} - \text{US06 Test Average MPG}) / \text{US06 Test Average MPG}] * 100$$

## 4.4 Average Fuel Economy Display Validation Procedure – SC03 Fuel Economy Test

Immediately prior to beginning the sampled portion of the SC03 test, reset the vehicle's average fuel economy display.

At the completion of the SC03 test, when the engine has been turned off at the conclusion test, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for the SC03 test according to the methodology described in Appendix A.

Determine the percent difference between the value recorded from the fuel economy display and the calculated volumetric SC03 MPG –

$$\text{Percent Difference} = [(\text{Display MPG} - \text{SC03 MPG}) / \text{SC03 MPG}] * 100$$

## 4.5 Average Fuel Economy Display Validation Procedure – Cold CO Test

Prior to beginning the Cold CO exhaust emission test, reset the vehicle's average fuel economy display.

At the completion of the Cold CO test, when the engine has been turned off at the conclusion of Phase 3, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for each bag of the Cold CO test according to the methodology described in Appendix A.

Average the Bag 1, Bag 2, and Bag 3 volumetric fuel economy results using the following equation –

$$\text{Test Average MPG} = (\text{B1 dist} + \text{B2 dist} + \text{B3 dist}) / [(\text{B1 dist/B1 mpg}) + (\text{B2 dist/B2 mpg}) + (\text{B3 dist/B3 mpg})]$$

Where,

Test Average MPG = The average MPG (not the hot/cold weighted value) observed during the Cold CO test.

B1 dist, B2 dist, B3 dist = The actual distance travelled during the individual phases of the Cold CO test.

B1 mpg, B2 mpg, B3 mpg = The calculated volumetric fuel economy measured during the individual phases of the Cold CO test.

Determine the percent difference between the value recorded from the fuel economy display and the calculated Cold CO Test Average MPG –

$$\text{Percent Difference} = [(\text{Display MPG} - \text{Cold CO Test Average MPG}) / \text{Cold CO Test Average MPG}] * 100$$

## APPENDIX A – CALCULATING VOLUMETRIC FUEL ECONOMY

# DRAFT

## A.1 PREFACE

The fuel economy calculations in Part 600 (§600.113-12) of the Federal Register include factors for correcting the observed fuel economy to a value representative of 1975 gasoline properties. This appendix provides the appropriate method to determine a volumetric fuel economy based on the measured properties of the fuel used during the exhaust emission tests. The method uses measured fuel properties to determine the grams of carbon per gallon of test fuel combined with the hydrocarbon (HC), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>) emission rates (grams/mile) to calculate the fuel economy in miles per gallon (mpg).

## A.2 REQUIRED TEST FUEL PROPERTIES

A.2.1 Specific gravity (SG) measured using ASTM D 1298.

A.2.2 Carbon weight fraction (CWF) measured using ASTM D 3343.

## A.3 REQUIRED EMISSION MEASUREMENTS

Perform the exhaust emission test procedures according to the methods outlined in CFR Part 86 or CFR Part 1066. Use the calculation methods described in the appropriate part to determine the exhaust emission rates in grams/mile for the following emission constituents – hydrocarbons (HC), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>).

## A.4 VOLUMETRIC FUEL ECONOMY CALCULATION

Per bag volumetric miles per gallon is calculated by dividing the grams of carbon per gallon (gmC/gal) of fuel by the grams of carbon emitted by the vehicle per mile driven (gmC/mile). The grams of carbon emitted are calculated by multiplying the HC, CO, and CO<sub>2</sub> emission rate by the emission constituents carbon mass fraction (CMF). The carbon mass fraction of THC is calculated based on the CWF of the test fuel.

$$\text{gmC/gal} = \text{CWF} \times \text{SG} \times \text{Density of H}_2\text{O} @ 20^\circ\text{C} (998,200 \text{ gm/m}^3) \times (1 / 264.17 \text{ gal/m}^3)$$

$$\text{CMF}_{\text{HC}} = 12.011 / [12.011 + (\text{CWF} * 1.008)]$$

$$\text{CMF}_{\text{CO}} = 12.011 / (12.011 + 15.999) = 0.429$$

$$\text{CMF}_{\text{CO}_2} = 12.011 / [12.011 + (15.999 \times 2)] = 0.273$$

$$\text{gmC/mile} = [\text{CMF}_{\text{HC}} \times (\text{HC}_{\text{mass}} / \text{Bag dist})] + [\text{CMF}_{\text{CO}} \times (\text{CO}_{\text{mass}} / \text{Bag dist})] + [\text{CMF}_{\text{CO}_2} \times (\text{CO}_{2\text{mass}} / \text{Bag dist})]$$

$$\text{MPG} = \text{gmC/gal} / \text{gmC/mile}$$

Where,

HC<sub>mass</sub>, CO<sub>mass</sub>, CO<sub>2mass</sub> – bag measured HC, CO, and CO<sub>2</sub> mass emissions measured and calculated per CFR Part 86 or Part 1066.

Bag dist – measured driving distance during the bag sampling period.

**To:** Wright, DavidA[Wright.DavidA@epa.gov]  
**From:** Sigelko, Jenny (EEO)  
**Sent:** Mon 9/22/2014 5:30:50 PM  
**Subject:** RE: Propose moving J3066 Task Force Meeting to October 2 from September 25

I can probably make it work either day.

Thanks

Jenny

**From:** Wright, DavidA [mailto:[Wright.DavidA@epa.gov](mailto:Wright.DavidA@epa.gov)]  
**Sent:** Monday, September 22, 2014 1:04 PM  
**To:** Tommy\_Chang@ahm.honda.com; Buller, Patrick; Chris McCarthy; sconrad@hatci.com; Tom Beierschmitt (TEMA TTC); mky@chrysler.com; dennis.pawlak@na.mitsubishi-motors.com; douglas.reid@na.mitsubishi-motors.com; Paulina, Carl; Chris Nevers; Glodich, Jeffrey (J.M.); William Beggs; Ryan McGavock; Sigelko, Jenny (EEO); nokawa@mazdausa.com; Duoba, Michael J.; rloeffler@sae.org; Yuhase, Nicole (L.); yosuke\_sato@ahm.honda.com; Ellies, Ben; Bowu Reed  
**Subject:** Propose moving J3066 Task Force Meeting to October 2 from September 25

I would like to propose moving the next J3066 task force meeting from this Thursday, September 25 to Thursday, October 2 from 1 until 3 pm. Let me know if anyone has any conflicts with this proposed change.

Thanks,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)

**To:** Wright, DavidA[Wright.DavidA@epa.gov]  
**From:** Sigelko, Jenny (EEO)  
**Sent:** Fri 8/8/2014 12:17:51 PM  
**Subject:** RE: Proposed August Meeting Date for J3066 Task Force

I'm available until about 2:30 on 8/20, and all day 8/21.

Thanks

Jenny

Jenny Sigelko

Volkswagen Group of America

EEO-Auburn Hills MI

248 754 4214

[Jenny.Sigelko@VW.com](mailto:Jenny.Sigelko@VW.com)

**From:** Wright, DavidA [mailto:[Wright.DavidA@epa.gov](mailto:Wright.DavidA@epa.gov)]  
**Sent:** Thursday, August 07, 2014 5:49 PM  
**To:** Tommy\_Chang@ahm.honda.com; Buller, Patrick; chris.mccarthy@gm.com; sconrad@hatci.com; Tom Beierschmitt (TEMA TTC); mky@chrysler.com; dennis.pawlak@na.mitsubishi-motors.com; douglas.reid@na.mitsubishi-motors.com; Paulina, Carl; Chris Nevers; Glodich, Jeffrey (J.M.); William Beggs; Ryan McGavock; Sigelko, Jenny (EEO); nokawa@mazdausa.com; Duoba, Michael J.; Roxanne Loeffler; Yuhase, Nicole (L.); yosuke\_sato@ahm.honda.com; Ellies, Ben; Bowu Reed  
**Cc:** mark.a.theobald@gm.com  
**Subject:** Proposed August Meeting Date for J3066 Task Force

I would like to propose a revision to the meeting date for the August Task Force meeting. I propose the next meeting for the J3066 Task Force take place on Wednesday, August 20 from 1

til 3 pm at the EPA office on Traverwood in Ann Arbor, we had previously discussed meeting on Thursday, August 21. Let me know if Wednesday, August 20th will not work for any Task Force members.

Thanks,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)

**To:** French, Roberts[french.roberts@epa.gov]  
**Cc:** Wright, DavidA[Wright.DavidA@epa.gov]; [Ex. 7] @vw.com  
**From:** [Ex. 7]  
**Sent:** Tue 6/3/2014 6:36:57 PM  
**Subject:** RE: VW 2013 GHG Report  
CBI DVWXV COMMON CR1A CAR R02.pdf

Hello Rob,

In response to your question to Stuart, the following is provided. We submitted a joint CAFE/GHG report through VERIFY by the March 31 deadline. The final report is submitted through VERIFY after all errors are resolved and the CAFE/GHG calculations match and are confirmed by EPA.

The full 2013 model year final GHG report, due May 1 per §86.1865-12, was also submitted. I have attached a copy for your reference.

Best regards,

[Ex. 7]

**Ex. 7**

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: [Ex. 7]

Cell: [Ex. 7]

E-Mail [redacted] **Ex. 7** [redacted]

**From:** [redacted] **Ex. 7**  
**Sent:** Tuesday, June 03, 2014 1:55 PM  
**To:** [redacted] **Ex. 7**  
**Subject:** FW: VW 2013 GHG Report

Fyi...

**From:** French, Roberts [<mailto:french.roberts@epa.gov>]  
**Sent:** Tuesday, June 03, 2014 8:05 AM  
**To:** [redacted] **Ex. 7**  
**Cc:** Wright, DavidA  
**Subject:** VW 2013 GHG Report

[redacted] **Ex. 7** [redacted]

Has VW submitted a 2013 model year final GHG report per 86.1865-12(l)(2)? I could not find it in Verify, but perhaps it got mis-categorized.

Thanks,

Rob

**Roberts W. French, Jr.**

U.S. Environmental Protection Agency

National Vehicle and Fuel Emissions Laboratory

2000 Traverwood Drive

Ann Arbor, Michigan 48105

(734) 214-4380

**To:** French, Roberts[french.roberts@epa.gov]  
**Cc:** Wright, DavidA[Wright.DavidA@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Fri 5/16/2014 11:59:07 AM  
**Subject:** RE: PHEV calculator

Hello Rob,

Thanks you for the clarification. I've sent your answer over to my German colleagues and asked if this is now helps them understand the issue. In the meantime I am still hoping we can have a discussion sometime next week.

Thanks again,

**Ex. 7**

**From:** French, Roberts [mailto:french.roberts@epa.gov]  
**Sent:** Thursday, May 15, 2014 11:25 AM  
**To:** [REDACTED] Ex. 7  
**Cc:** Wright, DavidA  
**Subject:** RE: PHEV calculator

**Ex. 7**

With regard to the first page of your questions/comments, I think you'll find that the calculator does the things on both sides of the page.

CAFE and GHG values, and the utilized MPGe/GHG values for the label (not actually on the label, but used to determine MPG/GHG ratings), are done using the "stepwise" utility factor approach shown on the right side of the page. This is consistent with J1711. What is shown in the box on that page is a utilitized charge-depleting value, and thus not appropriate for label use to represent charge-depleting operation.

J1711 doesn't really inform us completely as to how to determine ONLY a charge-depleting value, which we need to do for the label. Hence the calculations shown on the left side of your page.

When we discuss PHEV calculations we definitely need to be specific as to whether we are talking about label, CAFE, or GHG, since there are differences in methodology.

Rob

**Roberts W. French, Jr.**

U.S. Environmental Protection Agency

National Vehicle and Fuel Emissions Laboratory

2000 Traverwood Drive

Ann Arbor, Michigan 48105

(734) 214-4380

**From:** [REDACTED] Ex. 7 [REDACTED]@vw.com]  
**Sent:** Thursday, May 15, 2014 11:03 AM  
**To:** French, Roberts  
**Subject:** RE: PHEV calculator

Hello Rob,

No problem. I've asked my team to make sure they review the PHEV calculator you recently shared.

Thanks,

**Ex. 7**

**From:** French, Roberts [mailto:[french.roberts@epa.gov](mailto:french.roberts@epa.gov)]  
**Sent:** Thursday, May 15, 2014 10:57 AM  
**To:** **Ex. 7**  
**Subject:** PHEV calculator

**Ex. 7**

Sorry for the multiple emails. I just looked at your Powerpoint and I see that some of your questions are about my calculator!

Rob

**Roberts W. French, Jr.**

U.S. Environmental Protection Agency

National Vehicle and Fuel Emissions Laboratory

2000 Traverwood Drive

Ann Arbor, Michigan 48105

(734) 214-4380

**To:** Mazaitis, Vincent[mazaitis.vincent@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Wed 10/8/2014 1:12:25 PM  
**Subject:** VW e\_Golf Test Vehicle

Hello Vince and Jim,

I wanted to let you know that the VW e-Golf will be picked-up from your facility today, subsequent to our delivery of a car for the technology event.

Thank you again for your assistance over the last couple of days.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:wiliam.rodgers@vw.com)

**To:** Wehrly, Linc[wehrly.linc@epa.gov]; Wright, DavidA[Wright.DavidA@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Thur 5/15/2014 1:11:08 PM  
**Subject:** FW: EPA PHEV / BEV Questions  
PHEV BEV Question EPA.pdf

Hello Linc and David,

I just sent this email to Jim asking for a meeting and attaching some PHEV and BEV certification questions. Is it possible to discuss these points next week? Let me know if you have time available and I can set up a meeting.

Thank you and best regards,

[REDACTED] Ex. 7

---

**From:** [REDACTED] Ex. 7  
**Sent:** Thursday, May 15, 2014 8:47 AM  
**To:** Snyder, Jim (Snyder.Jim@epa.gov)  
**Subject:** FW: EPA PHEV / BEV Questions

Hello Jim,

The VW Group would like to schedule a meeting (or conference call) with EPA staff and VW certification staff to discuss PHEV and BEV certification. There are still some questions we have regarding PHEV calculations and testing we would like to discuss with you. In advance of the meeting please see the attached presentation with our open points or questions.

Is there a time that works best for you? My proposal is to have the meeting early next week if that is possible for EPA staff. I understand you may want to discuss our questions internally first.

Thank you and best regards,

[REDACTED] Ex. 7

**To:** Wright, DavidA[Wright.DavidA@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Fri 5/9/2014 6:10:25 PM  
**Subject:** RE: Audi Q3

Thanks David.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**From:** Wright, DavidA [mailto:[Wright.DavidA@epa.gov](mailto:Wright.DavidA@epa.gov)]  
**Sent:** Friday, May 09, 2014 2:09 PM  
**To:** Rodgers, William (EEO)  
**Cc:** Mazaitis, Vincent; Snyder, Jim  
**Subject:** FW:

William,

Attached are the results from the testing on the vehicle. Please do not hesitate to contact me if you have any questions.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)

**From:** Mazaitis, Vincent  
**Sent:** Friday, May 09, 2014 10:11 AM  
**To:** Wright, DavidA  
**Subject:**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]; Haynes, Ben[haynes.ben@epa.gov]  
**From:** Giles, Michael (EEO)  
**Sent:** Mon 9/22/2014 12:04:56 PM  
**Subject:** VW Group [Ex. 4 - CBI]

Hello Jim and Ben,

I submitted the

**Ex. 4 - CBI**

Please confirm the schedule when you have it.

Regards

Mike

Michael Giles

Certification Engineer

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4229

Fax: 248 754 4207

mailto: [Michael.Giles@VW.com](mailto:Michael.Giles@VW.com)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Giles, Michael (EEO)[michael.giles@vw.com]; Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Fri 9/12/2014 5:49:34 PM  
**Subject:** RE: VW Group removed.txt

**Ex. 4 - CBI**

Jim,

**Ex. 4 - CBI**

Regards,

Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.  
Engineering and Environmental Office  
Auburn Hills, MI  
(248) 754-4219  
william.rodgers@vw.com

**From:** Rodgers, William (EEO)  
**Sent:** Friday, September 12, 2014 11:02 AM  
**To:** "Jim Snyder" (Snyder.Jim@epamail.epa.gov)

**Cc:** Giles, Michael; Allen, Gregory (EEO); Thomas, Richard (EEO)

**Subject:** VW Group

**Ex. 4 - CBI**

Hello Jim,

# **Ex. 4 - CBI**

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**Ex. 4 - CBI**

To: Snyder, Jim[Snyder.Jim@epa.gov]  
Cc: [REDACTED] Ex. 7 [REDACTED] Ex. 7  
[REDACTED] @vw.com; [REDACTED] Ex. 7  
[REDACTED] @vw.com  
From: [REDACTED] Ex. 7  
Sent: Thur 9/11/2014 7:13:09 PM  
Subject: VW - [REDACTED] Ex. 4 - CBI

Hello Jim and Ben,

## Ex. 4 - CBI

Thanks for the follow up earlier today. We will discuss further next week.

Regards

[REDACTED] Ex. 7 [REDACTED]

## Ex. 7

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: [REDACTED] Ex. 7 [REDACTED]

Fax: [REDACTED] Ex. 7 [REDACTED]

mailto:

**Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com];  
Ex. 7  
**From:** Rodgers, William (EEO)  
**Sent:** Tue 9/9/2014 2:32:13 PM  
**Subject:** VW Ex. 4 - CBI

Hello Jim,

We have uploaded to the Verify system a request for EPA approval relating to Ex. 4 - CBI  
Ex. 4 - CBI Please review and approve Ex. 4 - CBI at  
your earliest convenience.

Regards,

Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.  
Engineering and Environmental Office  
Auburn Hills, MI  
(248) 754-4219  
william.rodgers@vw.com

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com];  
(EEO) **Ex. 7**  
**From:** Giles, Michael (EEO)  
**Sent:** Tue 9/9/2014 2:07:04 PM  
**Subject:** RE: VW Group **Ex. 4 - CBI**

**Ex. 7**

Hello Jim,

Thanks for the information. We have some feedback and further questions for the **Ex. 4 - CBI**

## **Ex. 4 - CBI**

# **Ex. 4 - CBI**

- 4 Test timing: VW plans to deliver the vehicle on Friday 10/3 or early Monday 10/6.
- o Is it possible to begin testing on Monday 10/6?
  - o Is it possible to continue testing Friday 10/10?

Regards,

Mike,

**From:** Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]  
**Sent:** Monday, September 08, 2014 5:18 PM  
**To:** Giles, Michael (EEO)  
**Cc:** Rodgers, William (EEO); Allen, Gregory (EEO); Thomas, Richard (EEO); Ex. 7  
**Subject:** RE: VW Grouop Ex. 4 - CBI

For the week of the Technology Showcase, the lab plans to do normal testing Tuesday and Wednesday but Thursday won't run much if at all. So its possible that it could get tested that week though it may not complete that week. I will send the lab an official note saying that you'd like to test that week but nothing is guaranteed until an official waiver request is submitted and scheduled.

I no luck with the other questions yet. Will pursue Ex. 4 - CBI questions tomorrow.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Giles, Michael (EEO) [<mailto:michael.giles@vw.com>]  
**Sent:** Friday, September 05, 2014 2:56 PM  
**To:** Snyder, Jim  
**Cc:** Rodgers, William (EEO); Allen, Gregory (EEO); Thomas, Richard (EEO); Ex. 7  
**Subject:** VW Grouop Ex. 4 - CBI

Hello Jim,

This is a follow up on the status of testing for our Ex. 4 - CBI which we had discussed earlier this summer.

# Ex. 4 - CBI

Assuming yes, we would like to request that the testing occur the week of October 6<sup>th</sup> if available. We understand that EPA cannot make a fixed schedule prior to supplemental data submission, however if you could let us know of current lab availability at that time , and let the lab know of our intentions, it would be appreciated.

Regards,

Mike

Michael Giles

Certification Engineer

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4229

Fax: 248 754 4207

mailto: [Michael.Giles@VW.com](mailto:Michael.Giles@VW.com)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Rodgers, William (EEO)  
**Sent:** Thur 9/4/2014 11:17:20 AM  
**Subject:** FW: **Ex. 4 - CBI** Date set - **Ex. 4 - CBI**

Hello Jim,  
We would like to request a rescheduling of the upcoming **Ex. 4 - CBI** below to Wednesday, October 29th, with vehicle delivery to EPA on October 27th.  
Please let us know if this is possible.

Thanks,

Bill Rodgers  
VWGoA EEO  
(248) 754-4219

-----Original Message-----

From: no-reply@epa.gov [mailto:no-reply@epa.gov]  
Sent: Wednesday, September 03, 2014 8:28 AM  
To: Thomas, Richard (EEO); Rodgers, William (EEO); Allen, Gregory (EEO); Giles, Michael (EEO)  
Subject: **Ex. 4 - CBI** Date set

The following is a courtesy copy of status message for a Verify submission. Any references made to links refer to links which will appear in the CDX Inbox message.

**Ex. 4 - CBI**

The test date is 10/16/2014.

The Verify submission this message relates to has the following values:

**Ex. 4 - CBI**

The following transaction identifier has been assigned to this request:

**Ex. 4 - CBI**

Please do not reply to this message.

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [REDACTED] Ex. 7 [REDACTED] @vw.com];  
**Ex. 7**  
**From:** [REDACTED] Ex. 7  
**Sent:** Fri 8/29/2014 2:23:29 PM  
**Subject:** RE: VW Group - **Ex. 4 - CBI**

Jim,

## **Ex. 4 - CBI**

Thanks,

**Ex. 7**

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Thursday, August 28, 2014 4:00 PM  
**To:** [REDACTED] Ex. 7  
**Cc:** [REDACTED] Ex. 7  
**Subject:** RE: VW Group - **Ex. 4 - CBI**

## **Ex. 4 - CBI**

[REDACTED] Ex. 4 - CBI [REDACTED] we have the usual new model year hurdles to get through before a new Certificate can be approved.

- [REDACTED] We have to have a Manufacturer's Pre-Cert mtg to inform EPA of new vehicles, models, and new technology coming.
- [REDACTED] Request for Approval of VW's ADP durability process.
- [REDACTED] Request for Approval of VW's diesel AECDs and SCR technologies

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency

(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** [REDACTED] **Ex. 7** **@vw.com]**

**Sent:** Thursday, August 28, 2014 2:13 PM

**To:** Snyder, Jim

**Cc:** [REDACTED] **Ex. 7**

**Subject:** VW Group -

**Ex. 4 - CBI**

Hello Jim,

**Ex. 4 - CBI**

[REDACTED]  
me know if you have any questions.

Regards,

**Ex. 7**

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

**Ex. 7**



**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [REDACTED] Ex. 7 [REDACTED] @vw.com];  
**Ex. 7**  
**From:** [REDACTED] Ex. 7  
**Sent:** Fri 8/29/2014 11:21:20 AM  
**Subject:** RE: VW Group - [REDACTED] **Ex. 4 - CBI**

Thanks Jim.

We are working on all fronts for the upcoming Certification request.

Have a good holiday

## **Ex. 7**

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Thursday, August 28, 2014 4:00 PM

**To:** [REDACTED] Ex. 7 [REDACTED]  
**Cc:** [REDACTED] Ex. 7 [REDACTED]  
**Subject:** RE: VW Group - [REDACTED] **Ex. 4 - CBI**

### **Ex. 4 - CBI**

**Ex. 4 - CBI** we have the usual new model year hurdles to get through before a new Certificate can be approved.

- We have to have a Manufacturer's Pre-Cert mtg to inform EPA of new vehicles, models, and new technology coming.
- Request for Approval of VW's ADP durability process.
- Request for Approval of VW's diesel AECDs and SCR technologies

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: [redacted] Ex. 7 [redacted]@vw.com]

Sent: Thursday, August 28, 2014 2:13 PM

To: Snyder, Jim

Cc: [redacted] Ex. 7 [redacted]

Subject: VW Group - [redacted]

**Ex. 4 - CBI**

Hello Jim,

**Ex. 4 - CBI**

Regards,

**Ex. 7**

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

# Ex. 7

**To:** andrew.ramos@gm.com[andrew.ramos@gm.com]; 'ball.joel@epa.gov'['ball.joel@epa.gov']; Beierschmitt, Thomas (T.A.){tbeiers1@ford.com}; 'Berg, Olle ()'[olle.berg@volvocars.com]; 'Bob Maxwell'[remaxwell@comcast.net]; brian.mace@horiba.com[brian.mace@horiba.com]; 'Buller, Patrick'[patrick.buller@volvocars.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; 'chris.mccarthy@gm.com'['chris.mccarthy@gm.com']; 'david.woods@chrysler.com'[david.woods@chrysler.com]; 'Dennis Pawlak'[Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid'[Douglas.Reid@na.mitsubishi-motors.com]; Dr. Robert Otto Rasmussen, PE [Robotto@TheTranstecGroup.com]; 'Duoba, Mike'[mduoba@anl.gov]; 'Jeff Foor'[jdf14@chrysler.com]; 'Jenny.Sigelko@vw.com'[Jenny.Sigelko@vw.com]; 'JNIKEUS@volvocars.com'[JNIKEUS@volvocars.com]; 'Keith Thompson'[Keith.Thompson@bepco.com]; kyle.bedsole@gm.com[kyle.bedsole@gm.com]; 'Mahmoud Yassine'[mkky@chrysler.com]; 'Marc Belzile'[marc.a.belzile@tc.gc.ca]; 'mark paxton'[mpaxton@ganassi.com]; 'Meyer, Norm'[norm.meyer@tc.gc.ca]; mike.timmerman@horiba.com[mike.timmerman@horiba.com]; Okawa, Naoyasu (N.)[okawa.n@mazda.co.jp]; Peabody, Jason (J.A.)[jpeabod6@ford.com]; 'Peter Z. Janosi'[peter.janosi@roush.com]; 'RMiller@hatci.com'['RMiller@hatci.com']; 'Roxanne Loeffler'[rloeffler@sae.org]; 'Schlueter, Hannah (EASZ/1)'[hannah.schlueter@volkswagen.de]; sconrad@hatci.com [sconrad@hatci.com]; 'snyder.jim@epa.gov'['snyder.jim@epa.gov']; Steve Karamihas[stevemk@umich.edu]; steve.baldus@gm.com[steve.baldus@gm.com]; 'Suanne.Thomas@vw.com'[Suanne.Thomas@vw.com]; 'tom.beierschmitt@tema.toyota.com'['tom.beierschmitt@tema.toyota.com']; 'tommy\_chang@ahm.honda.com'['tommy\_chang@ahm.honda.com']; 'Vineet Mehta'[vineet@teslamotors.com]; William Beggs <william.beggs@gm.com>[william.beggs@gm.com]; 'William Meschievitz'[william.meschievitz@tema.toyota.com]; Ott, William[ott.william@epa.gov]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Yuhase, Nicole (L.)[nyuhase@ford.com]; 'Jeff Foor'[j.foor@chrysler.com]; 'Chris McCarthy'[chris.mccarthy@gm.com]; 'Tom Beierschmitt (TEMA TTC)'[tom.beierschmitt@tema.toyota.com]; Snyder, Jim[Snyder.Jim@epa.gov]; 'Fink, Justin'[JFink@hatci.com]; 'Nikeus, Jill (J.N.)'[jill.nikeus@volvocars.com]; Wright, DavidA[Wright.DavidA@epa.gov]; Nguyen, Hieu[hnguyen@ftt-a.com]; Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]

**From:** Glodich, Jeffrey (J.M.)  
**Sent:** Tue 8/26/2014 1:29:36 PM  
**Subject:** SAE LDVP Agenda 8-27-14

Agenda - Light Duty Vehicle Performance Measurement Standards Committee - 8\_26\_2014.doc

Hello all,

Agenda for tomorrow's meeting attached.

Jeff  
**Jeff Glodich**  
Ford Motor Company  
Vehicle Environmental Regulatory Strategy and Planning  
217-E4 WHQ  
(313) 845-1579



## AGENDA

### Light-Duty Vehicle Performance Measurement Standards Committee

Chair – Jeff Glodich

Secretary – Nicole Yuhase

Wednesday, August 26<sup>th</sup>, 2014

1:00-3:00 PM

Toyota Technical Center, Ann Arbor  
(Building 1555, 1555 Woodridge)

Conference Call:

**Ex. 6**

Web Meeting:

<https://www.connectmeeting.att.com>

**Ex. 6**

1. Welcome and Introductions
2. Membership Review
3. Document Review

#### J2263: "Road Load Measurement Using Onboard Anemometry and Coastdown Techniques"

- Sponsor: Tom Beierschmitt
- Follow-up of j1263 pull-in items
- Continue document review

#### J1634: "Electric Vehicle Energy Consumption and Range Test Procedure"

- Pre-review discussion: APPENDIX A - ADDITIONAL MCT SEQUENCES (posted in Committee Work Area)
- Other required updates

#### J3066: "On-Board Fuel Consumption and Measurement Reporting Standard"

- Sponsor: David Wright
- Subcommittee status

#### 4. Other Business

#### NEXT MEETING

- 9/18 (proposed)

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**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Wed 8/20/2014 4:56:06 PM  
**Subject:** RE: 140517286

Hi Jim,

The Problem on the car was a pushed back pin that had some tools make a connection and some didn't.

The problem is solved and the customer is happy.

Thank you

**Tobias Glas**

In-Use Emission Compliance Specialist

Engineering & Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211

Cell: (248) 494-1537

Fax: (248) 754-4207

E-Mail: [Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)

**From:** Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]  
**Sent:** Tuesday, July 29, 2014 1:10 PM  
**To:** Glas, Tobias  
**Subject:** RE: 140517286

Yes, I would appreciate it. It is not just me, he is calling Joel Ball and an OBD guy every day.

**From:** Glas, Tobias [mailto:[Tobias.Glas@vw.com](mailto:Tobias.Glas@vw.com)]  
**Sent:** Tuesday, July 29, 2014 1:08 PM  
**To:** Snyder, Jim  
**Subject:** RE: 140517286

Well, at least he is determined! If it is ok with you I'll contact him today to get him off your back.

Thanks

Tobias

**From:** Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]  
**Sent:** Tuesday, July 29, 2014 1:07 PM  
**To:** Glas, Tobias  
**Subject:** RE: 140517286

Hi Tobias, I hope you were able to convince your regional manager how important it is to contact this guy, David Dalka quickly. He is calling and emailing several of us every day! He wants to know when he will hear from VW and what is your number so he can contact you (or the regional manager) directly.

If the OBD communication failure *is* because of a ECU-related problem then VW is obligated to

warranty it.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Snyder, Jim  
**Sent:** Monday, July 21, 2014 2:12 PM  
**To:** 'Glas, Tobias'  
**Subject:** FW: 140517286

Hi Tobias, This guy (Dave Dalka) is stuck between the dealer and the state inspection place . His car has OBD communication issues at the state I/M and with a generic scantool but the dealer says its okay and won't do anything unless he pays for a diagnosis first. He's talked to several people and is getting anxious.

Thanks for looking into to it.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Ball, Joel  
**Sent:** Thursday, July 17, 2014 3:54 PM  
**To:** Snyder, Jim  
**Subject:** FW: 140517286

Hi Jim,

Could you please contact VW. This individual's vehicle fails the state inspection in Illinois due to lack of communication with the testing equipment. However when he took the vehicle to the Volkswagen dealer they were able to communicate with their diagnostic equipment and found nothing wrong with the vehicle. He went back to the state inspection and failed again due to lack of communication. The state has told him that his vehicle is not working properly and needs to be fixed but VW won't fix it under warranty. His case # is 140 517 286

Joel Ball  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4238  
[ball.joel@epa.gov](mailto:ball.joel@epa.gov)

**From:** David Dalka [mailto:[Ex. 6](#)]  
**Sent:** Tuesday, July 15, 2014 10:38 AM  
**To:** Ball, Joel  
**Subject:** Fwd: 140517286

Joel, I left you a voice mail earlier today. This is the issue mentioned. Please call me at your convenience at [Ex. 6](#)

Thank you.

----- Forwarded message -----

**From:** **David Dalka** <[Ex. 6](#)>  
**Date:** Tue, Jul 15, 2014 at 9:34 AM  
**Subject:** 140517286  
**To:** [vwcUSTOMERCARE@vw.com](mailto:vwcUSTOMERCARE@vw.com)

Dear Ian,

Thank you for your time today talking about my challenging problem. I appreciate your listening and compassion. I've mostly enjoyed the VW Rabbit so this situation is rather traumatizing to me as I feel rather stuck between the EPA, the state testing (which I've learned is done differently in every state and

As you know, the EPA mandates emissions repairs on all vehicles less than 8 years old or 80,000 miles on it (please review <http://www.epa.gov/obd/pubs/420f09048.pdf>). Despite the highly friendly best efforts of Conrad at City Volkswagen as an initial courtesy, which I deeply appreciated, we have not gotten to the root cause of the issue and the problem is not yet solved.

The car has failed 3 times so far. Unfortunately, I do not currently feel any closer to resolving this issue than when I started. As I'm currently unemployed, I do not have available resources to fund an open ended diagnosis. Nor should I have to. No car built to the right quality standards should even be having this problem at less than 40,000 miles on any car.

I feel stuck in a black hole between the EPA, the State of IL emissions testing, the dealer and VW corporate. The bottom line is that the OBD can't be read but the emissions testing place lacks the power to mandate a certain manufacturer repair and there is no way for me to do any of the following:

- 1) Know I'm focused on the right problem
- 2) A clear path to a no cost or cost effective solution - there is one repair shop in the region that allegedly charges \$49 for a diagnosis and guarantees their repair work or your money back. The problem with that option is that as we discussed you won't accept their OBD determination.

I'd be forever appreciative if you could get upper VW management to fund the discovery that you suggest at City Volkswagen needs to do for us to proceed under the spirit of the warranty repair rather than the legalities of it. This action would restore my trust in a product I like overall and would likely make me a customer for life. Failure to fix it likely means I could never buy a VW in good faith again.

I look forward to your help in resolving this problem. Thank you.

David Dalka

Business Transformation Consultant / Facilitator / Keynote Speaker

Primary:  **Ex. 6**

The content of this email is private unless otherwise noted.

\*\*\*Please excuse any typos from my mobile device\*\*\*

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
Ex. 7  
**Sent:** Tue 8/19/2014 7:47:53 PM  
**Subject:** Volkswagen Telephone Conference Call

Hello Jim:

I spoke with Hannah this morning and they still have an open point regarding Ex. 4 - CBI  
Ex. 4 - CBI We would appreciate it if we could have a brief telephone conference. I think that this would be 30 minutes or less. Would you and the appropriate EPA staff be available Friday (08/22/14), Monday (08/25/14), or Tuesday (08/26/14). A morning call would be preferred (before 11:00 a.m.) to accommodate the time change with Germany.

Again, this is a test specific topic.

Best regards,

Ex. 7

---

Ex. 7

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Ex. 7

E-Mail:

**Ex. 7**

**To:** Rodgers, William (EEO)[William.Rodgers@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]; Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Mazaitis, Vincent  
**Sent:** Tue 8/12/2014 11:56:22 AM  
**Subject:** RE: VW Ex. 4 - CBI

Good morning Bill,

This vehicle has been released.

Thanks,

Vince Mazaitis

**From:** Rodgers, William (EEO) [mailto:William.Rodgers@vw.com]  
**Sent:** Tuesday, August 12, 2014 7:25 AM  
**To:** Mazaitis, Vincent  
**Cc:** Snyder, Jim; Allen, Gregory (EEO); Giles, Michael (EEO)  
**Subject:** VW Ex. 4 - CBI

Hello Vince,

Please release the Ex. 4 - CBI for pick up. We hope to have it transported back to Auburn Hills in the next day or so.

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** Mazaitis, Vincent[mazaitis.vincent@epa.gov]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]; Schlueter, Hannah  
(EASZ/1)[hannah.schlueter@volkswagen.de]  
**From:** Rodgers, William (EEO)  
**Sent:** Fri 8/8/2014 11:22:06 AM  
**Subject:** RE: Ex. 4 - CBI

Thanks Vince.

Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.  
Engineering and Environmental Office  
Auburn Hills, MI  
(248) 754-4219  
william.rodgers@vw.com

**From:** Mazaitis, Vincent [mailto:mazaitis.vincent@epa.gov]  
**Sent:** Friday, August 08, 2014 6:53 AM  
**To:** Rodgers, William (EEO)  
**Cc:** Snyder, Jim; Schlueter, Hannah (EASZ/1)  
**Subject:** Ex. 4 - CBI

Please find enclosed the Ex. 4 - CBI. If you have any questions or concerns, please contact me.

Thank You,

Vincent Mazaitis

(734)214-4864

Vince Mazaitis

**To:** Snyder, Jim[Snyder.Jim@epa.gov]; [Ex. 7] Ex. 7  
[Ex. 7] @volkswagen.de  
**Cc:** [Ex. 7]  
[Ex. 7] [Ex. 7] @vw.com]; [Ex. 7]  
[Ex. 7]  
**From:** [Ex. 7]  
**Sent:** Thur 8/7/2014 7:26:54 PM  
**Subject:** RE: Verbal [Ex. 4 - CBI] from EPA

Thanks Jim for the clarification and support.

After discussion with Hannah it was determine that no [Ex. 4 - CBI] was provided although there was a comment that the values were within tolerances of [Ex. 4 - CBI]

If available we would be interested in a look at [Ex. 4 - CBI]

Thanks

[Ex. 7]

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Thursday, August 07, 2014 3:22 PM

**To:** [Ex. 7]  
**Cc:** [Ex. 7]; [Ex. 7] Ex. 7  
**Subject:** RE: Verbal [Ex. 4 - CBI] from EPA

Correct, those are unadjusted but I did look at the [Ex. 4 - CBI] I can't guarantee any official data by tomorrow. It depends if they hold it up waiting for the [Ex. 4 - CBI]

-Jim

**From:** [redacted] Ex. 7 [redacted]@vw.com]  
**Sent:** Thursday, August 07, 2014 3:02 PM  
**To:** [redacted] Ex. 7 Snyder, Jim  
**Cc:** [redacted] Ex. 7 [redacted] Ex. 7  
**Subject:** Verbal [redacted] **Ex. 4 - CBI** from EPA

Hello Jim: Thanks for the call with the information below. As we discussed if you can ask the lab staff to expedite results for Friday if possible, it would be greatly appreciated.

@ [redacted] **Ex. 7**

I just got a call from Jim with (partial) verbal results listed below.

[redacted] **Ex. 4 - CBI**

[redacted] **Ex. 4 - CBI**

Also, Jim will be out of the office tomorrow so we should follow up with Vince.

[redacted]  
**Ex. 4 - CBI**

**Ex. 4 - CBI**

**From:** [redacted] Ex. 7  
**Sent:** Thursday, August 07, 2014 7:48 AM  
**To:** [redacted] Ex. 7  
**Cc:** [redacted] Ex. 7  
**Subject:** RE: VW [redacted] Ex. 4 - CBI

Just an update.

They now expect to start [redacted] Ex. 4 - CBI at 9 or so.

**From:** [redacted] Ex. 7  
**Sent:** Wednesday, August 06, 2014 4:18 PM  
**To:** [redacted] Ex. 7  
**Cc:** [redacted] Ex. 7 [redacted] Ex. 7  
**Subject:** FW: [redacted] Ex. 4 - CBI

FYI

**From:** Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]  
**Sent:** Wednesday, August 06, 2014 4:17 PM  
**To:** [redacted] Ex. 7  
**Subject:** RE: [redacted] Ex. 4 - CBI

I talked to the lab and they were prepping the car at that time. Still on track to test Thursday.

**From:** [redacted] Ex. 7 [mailto:[@vw.com\]](mailto:@vw.com)  
**Sent:** Wednesday, August 06, 2014 1:01 PM  
**To:** Snyder, Jim  
**Cc:** [redacted] Ex. 7 [redacted] Ex. 7  
[redacted] Ex. 7 Mazaitis, Vincent

**Subject:** RE: [REDACTED] **Ex. 4 - CBI**

Hello Jim,

Thanks for the update.

# Ex. 4 - CBI

Please keep us advised of the test schedule. At this time Bill and Hannah are planning to be there Thursday morning.

Regards

[REDACTED] **Ex. 7**

**From:** Snyder, Jim [mailto:[Snyder.Jim@epa.gov](mailto:Snyder.Jim@epa.gov)]  
**Sent:** Tuesday, August 05, 2014 6:21 PM  
**To:** [REDACTED] **Ex. 7**  
**Cc:** [REDACTED] Ex. 7; Mazaitis, Vincent; Wehrly, Linc  
**Subject:** VW [REDACTED] **Ex. 4 - CBI**

# Ex. 4 - CBI

**Ex. 4 - CBI**

# **Ex. 4 - CBI**

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** Rodgers, William (EEO)[William.Rodgers@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Tue 8/5/2014 4:59:53 PM  
**Subject:** FW: VW [Ex. 4 - CBI]

## Ex. 4 - CBI

Hello Bill,

Please find enclosed the Laboratory Test Data

Ex. 4 - CBI

If you have any questions or concerns, please contact me.

Thank you,

Vince Mazaitis

**From:** Bochenek, David  
**Sent:** Tuesday, August 05, 2014 9:52 AM  
**To:** Mazaitis, Vincent  
**Subject:** VW [Ex. 4 - CBI]

Vince,

Ex. 4 - CBI

Thanks

Dave

**To:** Snyder, Jim[Snyder.Jim@epa.gov]; Rodgers, William (EEO)[William.Rodgers@vw.com]; Mazaitis, Vincent[mazaitis.vincent@epa.gov]; Wehrly, Linc[wehrly.linc@epa.gov]  
**Cc:** Schlueter, Hannah (EASZ/1)[hannah.schlueter@volkswagen.de]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Mon 8/4/2014 8:24:41 PM  
**Subject:** RE: Scheduled VW

**Ex. 4 - CBI**

Test on Tuesday possible

Thanks for the information Jim. Hannah and Bill will be there in the morning for the testing.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Monday, August 04, 2014 4:12 PM  
**To:** Snyder, Jim; Rodgers, William (EEO); Mazaitis, Vincent; Wehrly, Linc  
**Cc:** Schlueter, Hannah (EASZ/1); Giles, Michael (EEO); Allen, Gregory (EEO)  
**Subject:** RE: Scheduled VW

**Ex. 4 - CBI**

Test on Tuesday possible

Okay, I just talked to the cell operator and they are prepping the car as I write this. So I guess we will have a chance to test it on Tuesday after all. Sorry for the confusion.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Snyder, Jim  
**Sent:** Monday, August 04, 2014 1:54 PM  
**To:** 'Rodgers, William (EEO)'; Mazaitis, Vincent; Wehrly, Linc  
**Cc:** Schlueter, Hannah (EASZ/1); Giles, Michael (EEO); Allen, Gregory (EEO)  
**Subject:** RE: Scheduled VW Testing

## Ex. 4 - CBI

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Rodgers, William (EEO) [<mailto:William.Rodgers@vw.com>]  
**Sent:** Monday, August 04, 2014 9:41 AM  
**To:** Mazaitis, Vincent  
**Cc:** Schlueter, Hannah (EASZ/1); Giles, Michael (EEO); Allen, Gregory (EEO); Snyder, Jim  
**Subject:** Scheduled VW Testing

Hello Vince,

We plan to have myself and Hannah Schlueter at your facility at 7AM for the scheduled testing of **Ex. 4 - CBI** tomorrow Aug 5<sup>th</sup>.

I will be out of the office the remainder of today so please reply to all copied on this message if there is any change to the schedule.

Regards,

Bill Rodgers

VWGoA EEO

Office (248) 754-4219

Mobile (810) 287-4581

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Schlueter, Hannah (EASZ/1)  
**Sent:** Mon 8/4/2014 6:09:08 PM  
**Subject:** Automatische Antwort: Scheduled VW Testing

Ich bin bis einschliesslich 07.08.2014 außer Haus.

I will be out of the office through 08-07-2014.

Meine Emails werde ich nur sporadisch lesen können.

I will not be able to read my emails regularly.

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Mon 8/4/2014 5:54:15 PM  
**Subject:** Automatic reply: Scheduled VW Testing

I will be out of the office Oct 17 through Oct 24th, returning Oct 25th. If the matter is urgent, please contact Bob Hart x.44224 for Certification issues, or Richard Thomas regarding Fuel Economy issues.

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [REDACTED] Ex. 7 [REDACTED] @volkswagen.de]; [REDACTED] Ex. 7  
[REDACTED] Ex. 7 [REDACTED] @vw.com]; [REDACTED] Ex. 7 [REDACTED] Ex. 7  
[REDACTED] Ex. 7 [REDACTED] @vw.com; [REDACTED] Ex. 7 [REDACTED]  
**From:** [REDACTED] Ex. 7  
**Sent:** Mon 8/4/2014 1:24:41 PM  
**Subject:** RE: [REDACTED] Ex. 4 - CBI

Thanks Jim, this is good news.

I will forward to Hannah. Also, Hannah and someone from our office will plan to be there tomorrow for the test.

Thanks

[REDACTED] Ex. 7

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Monday, August 04, 2014 9:18 AM  
**To:** [REDACTED] Ex. 7  
**Subject:** [REDACTED] Ex. 4 - CBI

## Ex. 4 - CBI

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)



**To:** [REDACTED] Ex. 7 [REDACTED] @vw.com]  
**Cc:** [REDACTED] Ex. 7 [REDACTED] @volkswagen.de]; Snyder,  
Jim[Snyder.Jim@epa.gov]; [REDACTED] Ex. 7 [REDACTED] @vw.com]; Spieth,  
John[Spieth.John@epa.gov]; [REDACTED] Ex. 7 [REDACTED]  
**From:** Wright, DavidA  
**Sent:** Thur 7/31/2014 9:14:22 PM  
**Subject:** RE: [REDACTED] **Ex. 4 - CBI**

Mike,

[REDACTED]  
**Ex. 4 - CBI**

[REDACTED]  
**Ex. 4 - CBI**

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

**From:** [REDACTED] Ex. 7 [REDACTED]@vw.com]  
**Sent:** Thursday, July 31, 2014 4:09 PM  
**To:** Wright, DavidA  
**Cc:** [REDACTED] Ex. 7  
**Subject:** RE: [REDACTED] Ex. 4 - CBI

Hello David,

Thanks again for your overall support and quick reply.

## Ex. 4 - CBI

We will follow up tomorrow. Please keep us advised of any new information as it becomes available.

Thanks

[REDACTED] Ex. 7

**From:** Wright, DavidA [mailto:[Wright.DavidA@epa.gov](mailto:Wright.DavidA@epa.gov)]  
**Sent:** Thursday, July 31, 2014 3:34 PM  
**To:** [REDACTED] Ex. 7  
**Cc:** [REDACTED] Ex. 7  
**Subject:** RE: [REDACTED] Ex. 4 - CBI

**Ex. 7**

# **Ex. 4 - CBI**

We apologize for the issue with **Ex. 4 - CBI** into our system and regret that this will delay Hannah from returning to Germany for an additional week.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)

**From:** Giles, Michael (EEO) [<mailto:michael.giles@vw.com>]  
**Sent:** Thursday, July 31, 2014 3:24 PM  
**To:** Wright, DavidA  
**Cc:** Schlueter, Hannah (EASZ/1); Snyder, Jim; Allen, Gregory (EEO)  
**Subject:** RE: **Ex. 4 - CBI**

Hi David,

Just a quick follow up – any feedback you could provide on the status of discussions for the Ex. 4 - CBI would be appreciated.

Thanks,

Ex. 7

**From:** Ex. 7  
**Sent:** Thursday, July 31, 2014 11:31 AM  
**To:** 'Wright, DavidA'  
**Cc:** Ex. 7 @vw.com)  
**Subject: RE** **Ex. 4 - CBI**

Hello David,

Thanks for making time in your schedule for the meeting this morning.

Hannah asked me to answer a question of whether we had any Ex. 4 - CBI  
**Ex. 4 - CBI** The answer to this question is no.

**Ex. 4 - CBI**

Regards

**Ex. 7**

**From:** [redacted] Ex. 7  
**Sent:** Thursday, July 31, 2014 10:03 AM  
**To:** 'Wright, DavidA'  
**Subject:** RE: [redacted] Ex. 4 - CBI

Thanks again for the follow up David. Hannah will be there at 10:30.

We set up a dial in number here so our office can participate:

Join by Phone

+1 (248) 754-6400

Conference ID: **Ex. 6**

**From:** Wright, DavidA [mailto:[Wright.DavidA@epa.gov](mailto:Wright.DavidA@epa.gov)]  
**Sent:** Wednesday, July 30, 2014 3:55 PM  
**To:** [redacted] Ex. 7  
**Cc:** [redacted] Ex. 7  
**Subject:** RE: [redacted] Ex. 4 - CBI

**Ex. 7**

I not able to answer your questions at this time, Vince and/or I will get back with you tomorrow morning after our morning meeting with the laboratory.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)

**From:** [REDACTED] Ex. 7 [REDACTED] @vw.com]

**Sent:** Wednesday, July 30, 2014 3:10 PM

**To:** Wright, DavidA

**Cc:** [REDACTED] Ex. 7 [REDACTED]

**Subject:** FW: [REDACTED] **Ex. 4 - CBI**

Hello David,

In Jims absence, can you assist with the questions below?

Thanks.

Regards,

## Ex. 7

**From:** [redacted] Ex. 7  
**Sent:** Wednesday, July 30, 2014 3:06 PM  
**To:** snyder.jim@epa.gov  
**Cc:** [redacted] Ex. 7  
**Subject:** [redacted] **Ex. 4 - CBI**

Hello Jim,

Is there a status update on the [redacted] **Ex. 4 - CBI** [redacted] that you can give us? I've tried to call Vince a few times, but have been unsuccessful in reaching him.

## Ex. 4 - CBI

[redacted] **Ex. 4 - CBI** [redacted] we were just wondering this so that way we can keep our timeline as close as possible to what we originally had planned for testing.

Feel free to give myself or [redacted] **Ex. 7** [redacted] a call to discuss.

Thanks Jim.

Regards,

**Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Glas, Tobias  
**Sent:** Tue 7/29/2014 6:13:53 PM  
**Subject:** FW: Dalka, 140517286

Hi Jim!

I hope that helps !

Tobias

**From:** Wigman, Ian  
**Sent:** Tuesday, July 29, 2014 2:12 PM  
**To:** Glas, Tobias  
**Subject:** Dalka, 140517286

Hey Tobias,

Here is the email we just sent to Mr. Dalka.

\*\*\*\*\* Email to Ex. 6 \*\*\*\*\*

Reference # 140517286

Dear Mr. Dalka,

We will be covering the diagnosis charge only if you bring the vehicle into a VW dealer for diagnosis.

You would need to make an appointment with the dealer so that we can get a readout. We will then determine if we need a field representative to come and inspect the vehicle. If the repairs are deemed to be something that is not emissions related, we will not be assisting with any repairs.

If they are emissions components, the repairs could be covered under the emissions warranty. We will cover the diagnosis so that we can find out what is going on.

If you have any other questions, please feel free to contact me back.

Please let me know if you have any questions.

Thanks!

Ian Wigman

VWoA Customer CARE Center

VW Regional Case Manager

Volkswagen of America

3800 W. Hamlin Rd.

Auburn Hills, MI 48326

Phone 248 754-3213

Ian.Wigman@vw.com

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Mon 7/28/2014 7:11:26 PM  
**Subject:** RE: VW Group - Lab Calculation Question

Thanks Jim. I have also checked back through 2012 calendar year and haven't found an issue.

-Bill

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Monday, July 28, 2014 2:46 PM  
**To:** Rodgers, William (EEO)  
**Subject:** RE: VW Group - Lab Calculation Question

Bill, I've heard back from the lab and they agree with your assessment and are reprocessing the data. They looked further and so far only found it on the Ex. 4 - CBI but are looking into it.

-Jim

**From:** Rodgers, William (EEO) [mailto:William.Rodgers@vw.com]  
**Sent:** Thursday, July 17, 2014 3:19 PM  
**To:** Snyder, Jim  
**Subject:** RE: VW Group - Lab Calculation Question

Ok thanks and have a good weekend.

-Bill

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Thursday, July 17, 2014 3:18 PM  
**To:** Rodgers, William (EEO)  
**Cc:** Giles, Michael (EEO); Reineke, Dennis (EEO)  
**Subject:** RE: VW Group - Lab Calculation Question

Okay I'll Look at this and then I'll have to take it up with the lab. I am off tomorrow and am trying to complete some cert reviews today so this won't get my attention until next week.

-Jim

**From:** Rodgers, William (EEO) [<mailto:William.Rodgers@vw.com>]  
**Sent:** Thursday, July 17, 2014 3:14 PM  
**To:** Snyder, Jim  
**Cc:** Giles, Michael (EEO); Reineke, Dennis (EEO)  
**Subject:** RE: VW Group - Lab Calulation Question

Hi Jim,

The Verify data only includes the weighted IntTHC results derived from the Net Concentrations from each phase. I underlined the values in question in the attached lab print report that appear unadjusted for Ambient concentrations. The use of these numbers result in a weight IntTHC nearly 4-times higher than our results.

Regards,

Bill

**From:** Snyder, Jim [<mailto:Snyder.Jim@epa.gov>]  
**Sent:** Thursday, July 17, 2014 1:52 PM  
**To:** Rodgers, William (EEO)  
**Cc:** Giles, Michael (EEO); Reineke, Dennis (EEO)  
**Subject:** RE: VW Group - Lab Calulation Question

I'll have to look into it. Do you know if this is calculation is also done in Verify or is this upstream of Verify calculations. I ask because there are some calculations that Verify does independently and correctly that the lab does differently but aren't not used by Verify.

Jim

**From:** Rodgers, William (EEO) [mailto:[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)]  
**Sent:** Thursday, July 17, 2014 1:44 PM  
**To:** Snyder, Jim  
**Cc:** Giles, Michael (EEO); Reineke, Dennis (EEO)  
**Subject:** VW Group - Lab Calculation Question

Hello Jim,

We have noticed what appears to be a discrepancy in recent THC calculations provided by your lab. It appears for diesel concepts the lab is using Integrated THC without subtracting Ambient concentrations as referenced in the CFR40 86.144-94. For example test number **Ex. 4 - CBI** you will see that raw IntTHC was used for calculating the phase net concentrations, instead of an Ambient adjusted Net IntTHC.

Please let us know if which calculation procedure is correct.

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** Snyder, Jim[Snyder.Jim@epa.gov]; Rodgers, William (EEO)[William.Rodgers@vw.com]  
**Cc:** Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**From:** Schrodrt, Thomas  
**Sent:** Thur 7/24/2014 1:29:58 PM  
**Subject:** RE: EPA Dyno decriptions

I will put that information together for you Jim.

Tom

**From:** Snyder, Jim  
**Sent:** Wednesday, July 23, 2014 6:08 PM  
**To:** Rodgers, William (EEO); Schrodrt, Thomas  
**Cc:** Allen, Gregory (EEO); Giles, Michael (EEO)  
**Subject:** RE: EPA Dyno decriptions

Tom, can you answer this or forward it on?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Rodgers, William (EEO) [<mailto:William.Rodgers@vw.com>]  
**Sent:** Wednesday, July 23, 2014 11:21 AM  
**To:** Snyder, Jim  
**Cc:** Allen, Gregory (EEO); Giles, Michael (EEO)  
**Subject:** EPA Dyno decriptions

Hi Jim,

Can you provide or direct me to information regarding the dynos used at your lab?

We are looking for the following:

Dyno type (front/4wheel)

Roller type Single roll / twin roller

Dyno id name/number

Thanks,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Wed 7/23/2014 3:14:11 PM  
**Subject:** VW Group THC question

Jim,

Have you been able to find out anything on the THC ambient adjust question we had last week?

We'd like to resolve it before our **Ex. 4 - CBI** meeting coming up next week.

Thanks,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Giles, Michael (EEO)[michael.giles@vw.com]; Rodgers, William (EEO)[William.Rodgers@vw.com]; Yang, Ching-Shih[Yang.Ching-Shih@epa.gov]  
**From:** Allen, Gregory (EEO)  
**Sent:** Thur, 7/10/2014 7:47:15 PM  
**Subject:** RE: [REDACTED] **Ex. 7**

Hello Jim,

That's my fault, I should have checked those earlier when I revised the originals.

The changes have been made and the corrected VGA-0100 data has been submitted.

Thanks Jim.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Thursday, July 10, 2014 3:32 PM  
**To:** Allen, Gregory (EEO)  
**Cc:** Giles, Michael (EEO); Rodgers, William (EEO); Yang, Ching-Shih  
**Subject:** RE: [REDACTED] **Ex. 7**

Greg, Bill checked the revised files and while the initial errors are fixed, he found a couple more errors near the end. Apparently the checking software stops after a certain number of errors so it didn't see them.

[redacted] Ex. 7 [redacted] Bill  
suggested duplicating what you did [redacted] Ex. 7 [redacted] since they are repeats from bag 1.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Allen, Gregory (EEO) [<mailto:Gregory.Allen@vw.com>]  
**Sent:** Thursday, July 10, 2014 11:47 AM  
**To:** Snyder, Jim  
**Cc:** Giles, Michael (EEO); Rodgers, William (EEO)  
**Subject:** RE: [redacted] Ex. 7

Hello Jim,

[redacted] Ex. 7 [redacted] Please let us know if they have any other issues with the datasets.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Giles, Michael (EEO)  
**Sent:** Wednesday, July 09, 2014 8:55 AM  
**To:** Allen, Gregory (EEO)  
**Subject:** FW: Ex. 7

**From:** Snyder, Jim [<mailto:Snyder.Jim@epa.gov>]  
**Sent:** Wednesday, July 09, 2014 8:50 AM  
**To:** Giles, Michael (EEO)  
**Subject:** Ex. 7

Mike, Bill ran the Ex. 7 outside tolerance. I think that has to get corrected before he can load them into their system.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Courtois, William  
**Sent:** Tuesday, July 08, 2014 9:23 AM  
**To:** Yang, Ching-Shih  
**Cc:** Haynes, Ben; Snyder, Jim  
**Subject:** Ex. 7

Folks,

**Ex. 7** lift points with (time, speed) values that do not align with drive schedule (time, speed) values.

See the attached files,

Bill Courtois

**From:** Yang, Ching-Shih  
**Sent:** Monday, July 07, 2014 1:31 PM  
**To:** Courtois, William  
**Cc:** Haynes, Ben; Snyder, Jim  
**Subject:** RE: Need shift schedules

Attached are the XML shift schedule files.

Thanks, Ching-shih

**From:** Snyder, Jim  
**Sent:** Monday, July 07, 2014 1:30 PM  
**To:** Yang, Ching-Shih  
**Cc:** Haynes, Ben; Courtois, William  
**Subject:** RE: Need shift schedules

Ching-Shih, Bill, the **Ex. 7** look okay to me. The first file is a single 18 hill LA4. It does not include the 3<sup>rd</sup> day not transient portion after re-start . The 2<sup>nd</sup> file covers a double Highway test (prep and test).

-Jim

**From:** Yang, Ching-Shih  
**Sent:** Monday, July 07, 2014 11:13 AM

**To:** Snyder, Jim  
**Cc:** Haynes, Ben; Courtois, William  
**Subject:** RE: Need shift schedules

Jim,

[redacted] **Ex. 7** [redacted] in our system. I've attached the excel formats of the files for your review. Please let me know if and when it's good for me to send off to Bill.

Thanks, Ching-shih

**From:** Snyder, Jim  
**Sent:** Monday, July 07, 2014 11:01 AM  
**To:** Haynes, Ben; Yang, Ching-Shih  
**Cc:** Courtois, William; Spieth, John; Peralta, Maria  
**Subject:** RE: Need shift schedules

Please note that VW has encountered "logistical issues" with this vehicle. They are now saying it won't be available until after 28<sup>th</sup>. I also asked them if this is a new shift schedule or is it already in our system.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Haynes, Ben

**Sent:** Monday, July 07, 2014 9:23 AM  
**To:** Snyder, Jim; Yang, Ching-Shih  
**Cc:** Courtois, William; Spieth, John; Peralta, Maria  
**Subject:**  **Ex. 7**

I have a test request for the following vehicle:

VGA - Volkswagen Group

VW370 40145 /15 – FTP 0100 and HWA 0101

This vehicle can be scheduled for testing the middle of next week 07/17/14 if the shift schedules can be put in place.

Thanks for your help in advance.

**Ben Haynes**

Technical Information Specialist

TATD/VTC

Supporting the USEPA through Cooperative Agreement

under the SEE Program

Scheduling Office

734-214-4261

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Giles, Michael (EEO)[michael.giles@vw.com]; Rodgers, William  
(EEO)[William.Rodgers@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Thur 7/10/2014 3:46:32 PM  
**Subject:** FW: [REDACTED]

**Ex. 7**

Hello Jim,

**Ex. 7** have been corrected. Please let us know if they have any other issues with the datasets.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Giles, Michael (EEO)  
**Sent:** Wednesday, July 09, 2014 8:55 AM  
**To:** Allen, Gregory (EEO)  
**Subject:** FW: Need shift schedules

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Wednesday, July 09, 2014 8:50 AM  
**To:** Giles, Michael (EEO)  
**Subject:** FW: [REDACTED]

**Ex. 7**

Mike, Bill ran the **Ex. 7** through some checker on it found some [REDACTED] that

**Ex. 7**

are [Ex. 7] Look at the TXT files. IT shows which [Ex. 7]  
[Ex. 7] I think that has to get corrected before he can load them into their system.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Courtois, William  
**Sent:** Tuesday, July 08, 2014 9:23 AM  
**To:** Yang, Ching-Shih  
**Cc:** Haynes, Ben; Snyder, Jim  
**Subject:** [Ex. 7]

Folks,

drive [Ex. 7]

See the attached files,

Bill Courtois

**From:** Yang, Ching-Shih  
**Sent:** Monday, July 07, 2014 1:31 PM  
**To:** Courtois, William  
**Cc:** Haynes, Ben; Snyder, Jim  
**Subject:** RE: Need shift schedules

Attached are the XML shift schedule files.

Thanks, Ching-shih

**From:** Snyder, Jim  
**Sent:** Monday, July 07, 2014 1:30 PM  
**To:** Yang, Ching-Shih  
**Cc:** Haynes, Ben; Courtois, William  
**Subject:** RE: Need shift schedules

Ching-Shih, Bill, the shift schedules look okay to me. The first file is a single 18 hill LA4. It does not include the 3<sup>rd</sup> bag hot transient portion after re-start . The 2<sup>nd</sup> file covers a double Highway test (prep and test).

-Jim

**From:** Yang, Ching-Shih  
**Sent:** Monday, July 07, 2014 11:13 AM  
**To:** Snyder, Jim  
**Cc:** Haynes, Ben; Courtois, William  
**Subject:** Re: [REDACTED] Ex. 7

Jim,

The [REDACTED] Ex. 7 [REDACTED] are already in our system. I've attached the excel formats of the files for your review. Please let me know if and when it's good for me to send off to Bill.

Thanks, Ching-shih

**From:** Snyder, Jim

**Sent:** Monday, July 07, 2014 11:01 AM  
**To:** Haynes, Ben; Yang, Ching-Shih  
**Cc:** Courtois, William; Spieth, John; Peralta, Maria  
**Subject:** RE: Need shift schedules

Please note that VW has encountered “logistical issues” with this vehicle. They are now saying it won’t be available until after 28<sup>th</sup>. I also asked them if this is a new shift schedule or is it already in our system.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

CCN:EDD

**From:** Haynes, Ben  
**Sent:** Monday, July 07, 2014 9:23 AM  
**To:** Snyder, Jim; Yang, Ching-Shih  
**Cc:** Courtois, William; Spieth, John; Peralta, Maria  
**Subject:** Need shift schedules

I have a test request for the following vehicle:

VGA - Volkswagen Group

VW370 40145 /15 – FTP 0100 and HWA 0101

This vehicle can be scheduled for testing the middle of next week 07/17/14 if the shift schedules can be put in place.

Thanks for your help in advance.

**Ben Haynes**

Technical Information Specialist

TATD/VTC

Supporting the USEPA through Cooperative Agreement

under the SEE Program

Scheduling Office

734-214-4261

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Thomas, Richard (EEO)  
**Sent:** Wed 7/9/2014 3:01:23 PM  
**Subject:** pick-up Volkswagen EDVs

Jim;

FYI.....the four Volkswagen cars will be picked up today, the commercial carrier is on the way there now.

Thanks,

Richard

Richard E. Thomas

Senior Emission Certification Specialist

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4213

Fax: 248 754 4207

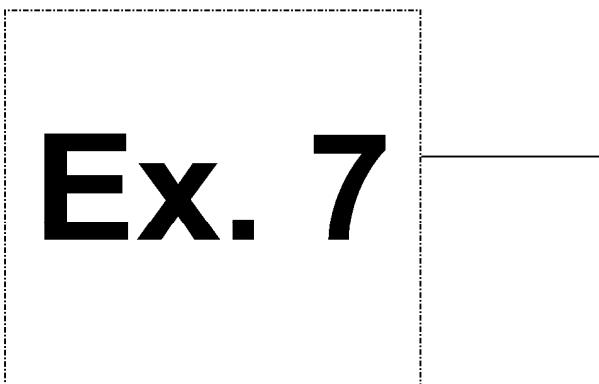
mailto: Richard.Thomas@VW.com

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Tue 7/8/2014 2:58:00 PM  
**Subject:** VW PHEV Label Calculation and BEV Testing Meeting

Hello Jim:

I am looking forward to our meeting this Thursday. It looks like three people from VW will be in attendance at EPA. However, we have some folks that are either traveling or in Germany that would like to join by telephone. I have set up a call-in number for their use, as long as this is okay with you. Your meeting notice provides the location as AA-Room-Office-N66-ConfRoom/AA-OTAQ-OFFICE. It would be great if a telephone with a speaker feature is available.

Best regards,



Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.

Phone:

Cell: (

E-Mail:

A large rectangular redaction box with a dashed border. Inside the box, the text "Ex. 7" is printed in a large, bold, black font.

**To:** Bill Rodgers (william.Rodgers@vw.com)[william.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Tue 7/8/2014 11:02:03 AM  
**Subject:** FAPA-RAF VW370 50379 - 15  
FAPA-RAF\_7-3-14.pdf  
VW370 50379 -15 7-2-14.pdf

Please find enclosed the Laboratory Test Data for the Subject vehicle. If you have any questions or concerns, please contact me.

Thank You,

Vincent Mazaitis

(734)214-4864

**To:** [REDACTED] Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [REDACTED] Ex. 7 [REDACTED] @volkswagen.de] [REDACTED] Ex. 7  
[REDACTED] Ex. 7 [REDACTED] vw.com]; [REDACTED] Ex. 7 [REDACTED] @vw.com]; [REDACTED] Ex. 7  
[REDACTED] Ex. 7 [REDACTED] @vw.com]; [REDACTED] Ex. 7 [REDACTED]  
**From:** [REDACTED] Ex. 7  
**Sent:** Mon 7/7/2014 8:39:52 PM  
**Subject:** VW Group - A few Questions for BEV /PHEV Testing

Hello Jim,

In preparation for testing of the e-Golf, we had a some general questions which I am forwarding along.

- How does EPA measure kWh during the test?
- Do we need to bring any measurement device for this step?
- Is there planned a standardization for the charger at EPA?
- For a PHEV, how are measurements made when the engine is running?
- Is it possible to share any test data XML for a BEV and or PHEV which we could use as a reference?

Any feedback or direction you can give relating to these questions below would be appreciated. If clarification on any of the questions is needed we could discuss by phone.

Thanks,

[REDACTED] Ex. 7 [REDACTED]

Regards,

[REDACTED] Ex. 7 [REDACTED]

# **Ex. 7**

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: **Ex. 7**

Fax: **Ex. 7**

mailto: **Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]; Mazaitis, Vincent[mazaitis.vincent@epa.gov]  
**Cc:** Schlueter, Hannah (EASZ/1)[hannah.schlueter@volkswagen.de]  
**From:** Giles, Michael (EEO)  
**Sent:** Mon 7/7/2014 7:04:30 PM  
**Subject:** VW - Test Status Request

Hello Jim and Vince,

This is a follow up to my voice message with Jim. As you are aware, we are anxiously awaiting the test results from the Jetta TDI.

Is it possible to check the status for us or provide a preliminary report? If the data is not ready yet, is it possible to provide indication if a re-test may be needed (within 3% and emissions standards)?

This would help greatly with in allocating our engineering resources for the week.

Thanks,

Mike

Michael Giles

Certification Engineer

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4229

Fax: 248 754 4207

mailto: [Michael.Giles@VW.com](mailto:Michael.Giles@VW.com)

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; Yuhase, Nicole (L.)[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]; cmccar61@ford.com[cmccar61@ford.com]; Beth Perry[eperry@sae.org]

**From:** Wright, DavidA  
**Sent:** Wed 5/20/2015 7:49:12 PM  
**Subject:** Proposed May 21st J3066 Task Force Meeting is Cancelled

I will schedule the next meeting once I have completed the data summary of the testing performed to date and completed the updates to the draft calculation method and test procedure.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

**To:** Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]  
**From:** Wright, DavidA  
**Sent:** Thur 4/9/2015 6:18:51 PM  
**Subject:** RE: Reminder - April 9th SAE J3066 Task Force Meeting at EPA Office

Thanks for getting back with me Jenny. I learned that I also had scheduled the meeting at the same time as [redacted] **Ex. 7**. I did have a couple of experts from GM and Ford participate which was very helpful, so, I am planning on making some changes to the existing draft based on their response and get that out for further review.

Regards,

David

**From:** Sigelko, Jenny (EEO) [mailto:[Jenny.Sigelko@vw.com](mailto:Jenny.Sigelko@vw.com)]  
**Sent:** Thursday, April 09, 2015 12:59 PM  
**To:** Wright, DavidA  
**Subject:** RE: Reminder - April 9th SAE J3066 Task Force Meeting at EPA Office

Hi David,

I do regret to tell you that I've gotten no response from my experts on either file.

And, I'm not going to be able to call-in to the meeting, either. So I've completely struck out for completing tasks!

Thanks,

Jenny

**From:** Wright, DavidA [mailto:[Wright.DavidA@epa.gov](mailto:Wright.DavidA@epa.gov)]

**Sent:** Monday, April 06, 2015 1:44 PM

**To:** [Tommy\\_Chang@ahm.honda.com](mailto:Tommy_Chang@ahm.honda.com); Buller, Patrick; [sconrad@hatci.com](mailto:sconrad@hatci.com); Tom Beierschmitt (TEMA TTC); [mky@chrysler.com](mailto:mky@chrysler.com); [dennis.pawlak@na.mitsubishi-motors.com](mailto:dennis.pawlak@na.mitsubishi-motors.com); [douglas.reid@na.mitsubishi-motors.com](mailto:douglas.reid@na.mitsubishi-motors.com); Paulina, Carl; Chris Nevers; Glodich, Jeffrey (J.M.); William Beggs; Ryan McGavock; Sigelko, Jenny (EEO); [nokawa@mazdausa.com](mailto:nokawa@mazdausa.com); Duoba, Michael J.; Yuhase, Nicole (L.); [yosuke\\_sato@ahm.honda.com](mailto:yosuke_sato@ahm.honda.com); Ellies, Ben; Bowu Reed; [cmccar61@ford.com](mailto:cmccar61@ford.com); Beth Perry

**Subject:** Reminder - April 9th SAE J3066 Task Force Meeting at EPA Office

The J3066 Task Force will meet this Thursday, April 9 at 1 pm at the main EPA office conference room at 2000 Traverwood. The April 9<sup>th</sup> meeting notice with conference call and webex details can be found at the Task Force webpage at the SAE Standards Works website, <http://www.sae.org/servlets/works/committeeHome.do?comtID=TEVLDVPMTF#>.

The agenda for this month's meeting is the expert review and comments on the Draft Mass Fuel Injected Calculation and the Draft – Fuel Economy Display Chassis Dynamometer Validation Testing documents. Both of these documents can be downloaded from the Task Force work area, <http://www.sae.org/servlets/works/postDiscussion.do?comtID=TEVLDVPMTF>. The Draft Mass Fuel Injected Calculation summarizes the standard method for determining the quantity of fuel injected to be used for the on-board fuel economy calculation. The Fuel Economy Display Chassis Dynamometer Validation Testing summarizes the method used to verify the on-board calculation to chassis dynamometer exhaust emission test results.

The detailed Agenda will be posted later this week. Let me know if you have any questions or issues with accessing the documents at the Task Force website.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; Yuhase, Nicole (L.)[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]; cmccar61@ford.com[cmccar61@ford.com]; Beth Perry[eperry@sae.org]

**From:** Wright, DavidA  
**Sent:** Wed 3/11/2015 5:22:26 PM  
**Subject:** Cancelling the March 12th J3066 Task Force Meeting

Tomorrow's J3066 Task Force meeting is cancelled. The next meeting of the J3066 Task Force will be scheduled for April 9<sup>th</sup> and will be at the EPA office on Traverwood. The meeting notice and draft agenda for the April meeting will be posted at the SAE J3066 Task Force web page.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; Yuhase, Nicole (L.)[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]; cmccar61@ford.com[cmccar61@ford.com]; Beth Perry[eperry@sae.org]

**From:** Wright, DavidA  
**Sent:** Wed 3/11/2015 12:57:17 PM  
**Subject:** J3066 Task Force Meeting Proposed Agenda/Confirmation

The discussion of the calculation method is being postponed until the April task force meeting, which is tentatively scheduled for April 9, two weeks before the SAE World Congress.

I will post the draft agenda to the Task Force website later this afternoon.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; Yuhase, Nicole (L.)[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]; cmccar61@ford.com[cmccar61@ford.com]; Beth Perry[eperry@sae.org]  
**From:** Wright, DavidA  
**Sent:** Mon 3/9/2015 2:12:23 PM  
**Subject:** J3066 Task Force Meeting Proposed Agenda/Confirmation  
mass fuel injected 15 Oct 14 ver3.docx

The plan for this Thursday's task force meeting is to have industry experts provide their comments on the draft method for calculating the quantity of fuel consumed (Draft Mass Fuel Injected Calculation). The draft document is attached, and can be found at the J3066 task force work area web page -  
<http://www.sae.org/servlets/works/postDiscussion.do?comtID=TEVLDVPMTF>.

The draft is for homogeneous charge gasoline-fueled spark ignition engines. The intent is to develop a standard calculation method for determining fuel consumed.

Please provide me a confirmation e-mail by tomorrow afternoon confirming the availability of your experts to call-in/attend Thursday's J3066 task force meeting.

Thanks,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467  
E-mail: wright.davida@epa.gov

# DRAFT

The quantity of air inducted into the cylinder is determined prior to calculating the quantity of fuel to inject into the spark ignition engine's cylinder. The cylinder air mass calculation is typically performed using either an intake air pressure sensor or a mass air flow sensor. When using an intake manifold pressure sensor the following calculation can be used to determine cylinder air mass ( $m_{air}$ ) -

$$m_{air} = VE \times \{(MAP \times V_{cyl}) / [(R / M_{air}) \times T]\}$$

where,  $m_{air}$  = Mass of air inducted per cylinder

VE = Engine volumetric efficiency (function of speed, load, and cam timing)

$M_{air}$  = Molecular mass of air

R = Gas Constant

T = Air temperature

MAP = Intake manifold air pressure

$V_{cyl}$  = Cylinder intake volume

When using a mass air flow sensor the following calculation can be used to determine cylinder air mass ( $m_{air}$ ) -

$$m_{air} = (MAF / RPM) \times (60 \text{ sec / min}) \times (2 \text{ rev / Eng. Cylinders})$$

where,  $m_{air}$  = Mass of air inducted per cylinder

MAF = Mass air flow in grams per second

RPM = Engine speed in revolutions per minute

Eng. Cylinders = Total number of engine cylinders

Once air mass is known the next step is to modify the cylinder air mass calculation by the long-term and short-term air fuel correction trim values and convert air mass to fuel mass by dividing by the desired air-fuel ratio –

$$m_{fuel} = (m_{air} \times LTFC \times STFC) / AFR$$

where,  $m_{fuel}$  = Mass of fuel injected per cylinder

$m_{air}$  = Mass of air inducted per cylinder

LTFC = Long-term fuel correction

STFC = Short-term fuel correction

AFR = Desired air/fuel ratio

The actual fuel mass injected is a function of the performance of the fuel injector, fuel

# DRAFT

temperature and pressure differential across the injector nozzle. Most fuel injectors are characterized by determining the mass of fuel injected as a function of time the injector is energized (grams/msec). Injector performance is typically measured at a fixed fuel temperature and pressure differential across the injector nozzle. Depending on the injector solenoid and the injector driver design, the performance of the fuel injector can also vary due to system voltage fluctuations. The impacts of these parameters on the actual fuel mass injected can be calculated as follows -

$$m_{fuelact} = m_{fuel} \times Volt_{cf} \times P_{cf} \times Density_{cf}$$

where,  $m_{fuelact}$  = Actual mass of fuel injected accounting for physical conditions at time of injection.

$Volt_{cf}$  = Injector voltage correction factor

$P_{cf}$  = Pressure differential across the injector correction factor

$Density_{cf}$  = Fuel density correction factor

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; McCarthy, Chris (C.)[CMCCAR61@ford.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; rloeffler@sae.org[rloeffler@sae.org]; Yuhase, Nicole (L.)[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]  
**From:** Wright, DavidA  
**Sent:** Thur 1/8/2015 11:32:00 PM  
**Subject:** J3066 documents discussed during this afternoon's webex  
Fuel Economy Display Test Procedure and Data Sheet Ver 11Dec14.docx  
fuel economy display validation test\_2Oct14.docx  
mass fuel injected\_15 Oct 14\_ver2.docx

Attached are the three documents we discussed during the webex this afternoon. The first document is the Fuel Economy Display Test Procedure and Data Sheet Ver 11Dec14, this document is the instruction document provided to the vehicle driver and the data sheet for recording the results of the on-board fuel economy display.

The second document is fuel economy display validation test 2Oct14, this document includes the calculations for determining the carbon balance fuel economy value for the emission test results not including the R-factor and also not weighting the results by the cold-hot fraction. Please review the document and provide me any comments you may have by Friday, January 23<sup>rd</sup>.

The last document is the mass fuel injected 15 Oct 14 ver2, this document includes a brief description of the method used by the powertrain controller to determine the mass of fuel to be injected on a spark-ignition engine. I would like the various experts to review the document and provide comments. The intent of this description is to have an example method for calculating fuel mass/volume to be used for reporting on the vehicle display. The expectation is that this method would be accurate and without bias. The current write up does not have sufficient detail and could use additional expert assistance.

Thanks,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)

INSTRUCTIONS FOR RECORDING THE TRIP Odometer and AVG ECONOMY on the **20XX XXXXXXXX**  
**Xxxxxxxxxx**, Test Group **XXXXV0X.XXXX**

---

On the attached Driver Information Center Fuel Economy Display DATA SHEET – Record the Test Date

RESET BOTH the TRIP Odometer and the AVG ECONOMY on the Driver Information Center prior to performing the FTP.

After completing Bag 2 record the TRIP Odometer and the AVG ECONOMY on the attached DATA SHEET.

After completing Bag 3 record the TRIP Odometer and the AVG ECONOMY on the attached DATA SHEET.

RESET BOTH the TRIP Odometer and the AVG ECONOMY on the Driver Information Center prior to performing the sampled portion of the HFET.

After completing the HFET record the TRIP Odometer and the AVG ECONOMY on the attached DATA SHEET.

RESET BOTH the TRIP Odometer and the AVG ECONOMY on the Driver Information Center prior to performing the sampled portion of the US06.

After completing the US06 record the TRIP Odometer and the AVG ECONOMY on the attached DATA SHEET.

---

#### Instructions for resetting the Trip Odometer and Average Economy

Refer to the attached pages from the 2011 Xxxxxxxxxx owners manual for additional details and figures.

#### Resetting the Trip Odometer

Press the trip/fuel button until TRIP displays in the readout located below the speedometer. Reset the trip odometer to zero by pressing the DIC set/reset button while the trip odometer is displayed.

#### Resetting the Average Economy

Press the trip/fuel button until AVG ECONOMY displays in the readout located below the speedometer. Reset AVG ECONOMY by pressing and holding the set/reset button while the AVG ECONOMY is displayed.

---

Driver Information Center Fuel Economy Display DATA SHEET

20XX XXXXXX XXXXXXXXX

Test Group: XXXXXXXX.XXXX

TEST DATE: \_\_\_\_\_

After completing the following portion of each test record the TRIP odometer and AVG ECONOMY below:

TRIP Odometer after Bag 2 of the FTP test \_\_\_\_\_ miles

AVG ECONOMY after Bag 2 of the FTP test \_\_\_\_\_ mpg

TRIP Odometer after Bag 3 of the FTP test \_\_\_\_\_ miles

AVG ECONOMY after Bag 3 of the FTP test \_\_\_\_\_ mpg

TRIP Odometer after Highway test \_\_\_\_\_ miles

AVG ECONOMY after the Highway test \_\_\_\_\_ mpg

TRIP Odometer after US06 test \_\_\_\_\_ miles

AVG ECONOMY after the US06 test \_\_\_\_\_ mpg

Comments: \_\_\_\_\_

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# DRAFT

## FUEL ECONOMY DISPLAY CHASSIS DYNAMOMETER VALIDATION TESTING

### RATIONALE

This test method is used to determine the accuracy of the vehicle's fuel economy display. The vehicle information center's displayed average fuel economy is recorded at the conclusion of a chassis dynamometer test and then is compared to the carbon-balance fuel economy measured during the chassis dynamometer test.

### 2. REFERENCES

#### 2.1 CFR Publications

The CFR is available from the Superintendent of Documents, U.S. Government Printing Office, Mail Stop: SSOP, Washington, DC, 20402-9320, <http://www.gpoaccess.gov/cfr/index.html>.

40 CFR Part 86              Control of Emissions from New and In-Use Highway Vehicles and Engines

40 CFR Part 600              Fuel Economy and Greenhouse Gas Exhaust Emissions of Motor Vehicles

#### 2.2 ASTM Publications

ASTM publications are available from the American Society of Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, <http://www.astm.org>.

ASTM D 1298 Standard

ASTM D 3343 Standard

### 3. DEFINITIONS

### 4. CHASSIS DYNAMOMETER VALIDATION OF VEHICLE INFORMATION CENTER DISPLAYED AVERAGE FUEL ECONOMY

#### 4.1 Average Fuel Economy Display Validation Procedure – 75° FTP Test

Prior to beginning the 75° FTP exhaust emission test, reset the vehicle's average fuel economy display.

At the completion of the 75° FTP test, when the engine has been turned off at the conclusion of Phase 3, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for each bag of the 75° FTP test according to the methodology described in Appendix A.

Average the Bag 1, Bag 2, and Bag 3 volumetric fuel economy results using the following equation –

$$\text{Test Average MPG} = (\text{B1 dist} + \text{B2 dist} + \text{B3 dist}) / [(\text{B1 dist/B1 mpg}) + (\text{B2 dist/B2 mpg}) + (\text{B3 dist/B3 mpg})]$$

Where,

Test Average MPG = Calculated average volumetric MPG (not the hot/cold weighted value) observed during the 75° FTP test.

B1 dist, B2 dist, B3 dist = Measured distance travelled during the individual phases of the 75° FTP test.

# DRAFT

FTP test.

B1 mpg, B2 mpg, B3 mpg = Calculated volumetric fuel economy (see Appendix A) measured during the individual phases of the 75□ FTP test.

Determine the percent difference between the value recorded from the fuel economy display and the calculated 75□ FTP Test Average MPG –

Percent Difference = [(Display MPG – 75□ FTP Test Average MPG)/ 75□ FTP Test Average MPG] \* 100

## 4.2 Average Fuel Economy Display Validation Procedure – Highway Fuel Economy Test

Immediately prior to beginning the sampled portion of the highway fuel economy test (HFET), reset the vehicle's average fuel economy display.

At the completion of the highway fuel economy test, when the engine has been turned off at the conclusion test, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for the HFET test according to the methodology described in Appendix A.

Determine the percent difference between the value recorded from the fuel economy display and the carbon-balance calculated highway fuel economy test MPG –

Percent Difference = [(Display MPG – HFET MPG)/HFET MPG] \* 100

## 4.3 Average Fuel Economy Display Validation Procedure – US06 Test

Prior to beginning the US06 exhaust emission test, reset the vehicle's average fuel economy display.

At the completion of the US06 test, when the engine has been turned off at the conclusion of the test, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for the US06 test according to the methodology described in Appendix A. If a split bag US06 test is performed calculate the volumetric fuel economy for each bag of the test.

Average the Bag 1 and Bag 2 volumetric fuel economy results using the following equation –

$$\text{Test Average MPG} = (\text{B1 dist} + \text{B2 dist}) / [(\text{B1 dist}/\text{B1 mpg}) + (\text{B2 dist}/\text{B2 mpg})]$$

Where,

Test Average MPG = Calculated average MPG observed during the city and highway portions of the US06 test.

B1 dist and B2 dist = Measured distance travelled during the city and highway phases of the US06 test.

B1 mpg and B2 mpg = Calculated volumetric fuel economy measured during the city and highway phases of the US06 test.

Determine the percent difference between the value recorded from the fuel economy display and

# DRAFT

the calculated US06 Test Average MPG –

$$\text{Percent Difference} = [(\text{Display MPG} - \text{US06 Test Average MPG}) / \text{US06 Test Average MPG}] * 100$$

## 4.4 Average Fuel Economy Display Validation Procedure – SC03 Fuel Economy Test

Immediately prior to beginning the sampled portion of the SC03 test, reset the vehicle's average fuel economy display.

At the completion of the SC03 test, when the engine has been turned off at the conclusion test, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for the SC03 test according to the methodology described in Appendix A.

Determine the percent difference between the value recorded from the fuel economy display and the calculated volumetric SC03 MPG –

$$\text{Percent Difference} = [(\text{Display MPG} - \text{SC03 MPG}) / \text{SC03 MPG}] * 100$$

## 4.5 Average Fuel Economy Display Validation Procedure – Cold CO Test

Prior to beginning the Cold CO exhaust emission test, reset the vehicle's average fuel economy display.

At the completion of the Cold CO test, when the engine has been turned off at the conclusion of Phase 3, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for each bag of the Cold CO test according to the methodology described in Appendix A.

Average the Bag 1, Bag 2, and Bag 3 volumetric fuel economy results using the following equation –

$$\text{Test Average MPG} = (\text{B1 dist} + \text{B2 dist} + \text{B3 dist}) / [(\text{B1 dist/B1 mpg}) + (\text{B2 dist/B2 mpg}) + (\text{B3 dist/B3 mpg})]$$

Where,

Test Average MPG = The average MPG (not the hot/cold weighted value) observed during the Cold CO test.

B1 dist, B2 dist, B3 dist = The actual distance travelled during the individual phases of the Cold CO test.

B1 mpg, B2 mpg, B3 mpg = The calculated volumetric fuel economy measured during the individual phases of the Cold CO test.

Determine the percent difference between the value recorded from the fuel economy display and the calculated Cold CO Test Average MPG –

$$\text{Percent Difference} = [(\text{Display MPG} - \text{Cold CO Test Average MPG}) / \text{Cold CO Test Average MPG}] * 100$$

## APPENDIX A – CALCULATING VOLUMETRIC FUEL ECONOMY

# DRAFT

## A.1 PREFACE

The fuel economy calculations in Part 600 (§600.113-12) of the Federal Register include factors for correcting the observed fuel economy to a value representative of 1975 gasoline properties. This appendix provides the appropriate method to determine a volumetric fuel economy based on the measured properties of the fuel used during the exhaust emission tests. The method uses measured fuel properties to determine the grams of carbon per gallon of test fuel combined with the hydrocarbon (HC), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>) emission rates (grams/mile) to calculate the fuel economy in miles per gallon (mpg).

## A.2 REQUIRED TEST FUEL PROPERTIES

A.2.1 Specific gravity (SG) measured using ASTM D 1298.

A.2.2 Carbon weight fraction (CWF) measured using ASTM D 3343.

## A.3 REQUIRED EMISSION MEASUREMENTS

Perform the exhaust emission test procedures according to the methods outlined in CFR Part 86 or CFR Part 1066. Use the calculation methods described in the appropriate part to determine the exhaust emission rates in grams/mile for the following emission constituents – hydrocarbons (HC), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>).

## A.4 VOLUMETRIC FUEL ECONOMY CALCULATION

Per bag volumetric miles per gallon is calculated by dividing the grams of carbon per gallon (gmC/gal) of fuel by the grams of carbon emitted by the vehicle per mile driven (gmC/mile). The grams of carbon emitted are calculated by multiplying the HC, CO, and CO<sub>2</sub> emission rate by the emission constituents carbon mass fraction (CMF). The carbon mass fraction of THC is calculated based on the CWF of the test fuel.

$$\text{gmC/gal} = \text{CWF} \times \text{SG} \times \text{Density of H}_2\text{O} @ 20^\circ\text{C} (998,200 \text{ gm/m}^3) \times (1 / 264.17 \text{ gal/m}^3)$$

$$\text{CMF}_{\text{HC}} = 12.011 / [12.011 + (\text{CWF} * 1.008)]$$

$$\text{CMF}_{\text{CO}} = 12.011 / (12.011 + 15.999) = 0.429$$

$$\text{CMF}_{\text{CO}_2} = 12.011 / [12.011 + (15.999 \times 2)] = 0.273$$

$$\text{gmC/mile} = [\text{CMF}_{\text{HC}} \times (\text{HC}_{\text{mass}} / \text{Bag dist})] + [\text{CMF}_{\text{CO}} \times (\text{CO}_{\text{mass}} / \text{Bag dist})] + [\text{CMF}_{\text{CO}_2} \times (\text{CO}_{2\text{mass}} / \text{Bag dist})]$$

$$\text{MPG} = \text{gmC/gal} / \text{gmC/mile}$$

Where,

HC<sub>mass</sub>, CO<sub>mass</sub>, CO<sub>2mass</sub> – bag measured HC, CO, and CO<sub>2</sub> mass emissions measured and calculated per CFR Part 86 or Part 1066.

Bag dist – measured driving distance during the bag sampling period.

# DRAFT

Prior to determining the quantity of fuel to inject in a spark ignition engine cylinder the quantity of air inducted into the cylinder is determined. The cylinder air mass calculation is typically performed using either an intake air pressure sensor or a mass air flow sensor. When using an intake manifold pressure sensor the following calculation can be used to determine cylinder air mass ( $m_{air}$ ) -

$$m_{air} = VE \times \{(MAP \times V_{cyl}) / [(R / M_{air}) \times T]\}$$

where,  $m_{air}$  = Mass of air inducted per cylinder

VE = Engine volumetric efficiency (function of speed, load, and cam timing)

$M_{air}$  = Molecular mass of air

R = Gas Constant

T = Air temperature

MAP = Intake manifold air pressure

$V_{cyl}$  = Cylinder intake volume

When using a mass air flow sensor the following calculation can be used to determine cylinder air mass ( $m_{air}$ ) -

$$m_{air} = (MAF / RPM) \times (60 \text{ sec / min}) \times (2 \text{ rev / Eng. Cylinders})$$

where,  $m_{air}$  = Mass of air inducted per cylinder

MAF = Mass air flow in grams per second

RPM = Engine speed in revolutions per minute

Eng. Cylinders = Total number of engine cylinders

Once air mass is known the next step is to modify the cylinder air mass calculation by the long-term and short-term air fuel correction trim values and convert air mass to fuel mass by dividing by the desired air-fuel ratio –

$$m_{fuel} = (m_{air} \times LTFC \times STFC) / AFR$$

where,  $m_{fuel}$  = Mass of fuel injected per cylinder

$m_{air}$  = Mass of air inducted per cylinder

LTFC = Long-term fuel correction

STFC = Short-term fuel correction

AFR = Desired air/fuel ratio

The actual fuel mass injected is a function of the performance of the fuel injector, fuel

# DRAFT

temperature and pressure differential across the injector nozzle. Most fuel injectors are characterized by determining the mass of fuel injected as a function of time the injector is energized (grams/msec). Injector performance is typically measured at a fixed fuel temperature and pressure differential across the injector nozzle. Depending on the injector solenoid and the injector driver design, the performance of the fuel injector can also vary due to system voltage fluctuations. The impacts of these parameters on the actual fuel mass injected can be calculated as follows -

$$m_{fuelact} = m_{fuel} \times Volt_{cf} \times P_{cf} \times Density_{cf}$$

where,  $m_{fuelact}$  = Actual mass of fuel injected accounting for physical conditions at time of injection.

$Volt_{cf}$  = Injector voltage correction factor

$P_{cf}$  = Pressure differential across the injector correction factor

$Density_{cf}$  = Fuel density correction factor

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; Mccarthy, Chris (C. )[CMCCAR61@ford.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; rloeffler@sae.org[rloeffler@sae.org]; Yuhase, Nicole (L. )[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]

**From:** Wright, DavidA

**Sent:** Wed 1/7/2015 9:59:19 PM

**Subject:** J3066 Task Force January 8th Meeting Notice and Agenda are posted on the SAE standards works website now

TF - On-Brd Fuel Cons Measurement and Report Std meeting notice 1-8-15[1].docx

The meeting notice with the webex information and the conference call numbers is also attached.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov



J3066 – TF - On-Brd Fuel Cons Measurement and Report Std  
January 8, 2015  
1:00 pm – 2:00 pm – EDT  
EPA Office of Transportation and Air Quality, 2000 Traverwood Drive,  
Ann Arbor, MI 48105 (Office Building)  
WebEx and Conference Call

## WebEx Meeting Information

Contact Information:  **Ex. 7**

Add this meeting to your calendar:

<https://sae.webex.com/sae/i.php?MTID=m997f02500491577d07f0e38f8b287d8e>

TF - On-Brd Fuel Cons Measurement and Report Std

Thursday, January 8, 2015

1:00 pm | Eastern Standard Time (New York, GMT-05:00) | 1 hr

## JOIN WEBEX MEETING

<https://sae.webex.com/sae/i.php?MTID=m319ee6cbe02b30581d8f1e5254dd8ca5>

Meeting number:  Non-Responsive

Meeting password:  Non-Responsive

## JOIN BY PHONE

Non-Responsive Call-in toll-free number (US/Canada)  
 Call-in toll number (US/Canada)

Access code:  Non-Responsive

Global call-in numbers:

<https://sae.webex.com/sae/globalcallin.php?serviceType=MC&ED=350026962&tollFree=1>

Toll-free dialing restrictions:

[http://www.webex.com/pdf/tollfree\\_restrictions.pdf](http://www.webex.com/pdf/tollfree_restrictions.pdf)

Unable to join the meeting? Contact support here:

<https://sae.webex.com/sae/mc>

You can contact me at:

Ex. 7

**IMPORTANT NOTICE:** This WebEx service includes a feature that allows audio and any documents and other materials exchanged or viewed during the session to be recorded. You should inform all meeting attendees prior to recording if you intend to record the meeting. Please note that any such recordings may be subject to discovery in the event of litigation.

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; Mccarthy, Chris (C. )[CMCCAR61@ford.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; rloeffler@sae.org[rloeffler@sae.org]; Yuhase, Nicole (L. )[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]  
**From:** Wright, DavidA  
**Sent:** Tue 1/6/2015 8:42:19 PM  
**Subject:** J3066 Task Force Meeting - January 8 at 1 pm at the EPA office  
Agenda J3066 Task Force January 8 2015.docx  
Fuel Economy Display Test Procedure and Data Sheet Ver 11Dec14.docx

Attached is a draft agenda for the January 8, 2015 meeting of the J3066 Task Force. A meeting announcement with conference call and webex information will be forthcoming. The meeting will take place at the EPA Office Building on 2000 Traverwood Drive. I have also attached a copy of the updated document being used by EPA for resetting and recording fuel economy information from the vehicle display during emission testing. I will add this document to the task force working documents along with a data sheet including data obtained to date. Let me know if you have any questions or comments.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov



## **AGENDA**

**J3066 - On-Board Fuel Consumption Measurement  
and Reporting Standard Task Force Meeting**

Chair – D. Wright

Thursday, January 8, 2015, 1:00 – 2:00 PM EDT

EPA Office of Transportation and Air Quality (Office Building)  
Conference Room N66

2000 Traverwood Drive, Ann Arbor, MI 48105

WebEx/Teleconference Available

**1. Welcome and Introductions**

At the beginning of each meeting the chairman must review the SAE Anti-Trust Statement, the SAE Patent Disclosure Statement, the SAE Transparency Statement and the IP Statement provided below.

**2. Membership Review**

**3. Document Review**

**J3066: “On-Board Fuel Consumption and Measurement Reporting Standard”**

Sponsor: D. Wright

- Review Fuel Economy Display Test Procedure and Data Sheet
- Review Data and Discuss Fuel Economy Calculation Method
- Draft Document Review

**4. Old Business**

**5. New Business**

**6. Next Meeting**

- February 12, 2015 (proposed)

**IMPORTANT NOTE:** Please be sure to provide the minutes and all attachments to the minutes in electronic format to SAE Staff.

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As a participant in SAE Technical Committees, individuals agree that the collective work of the committee(s) is the property of SAE, and SAE is charged with its publication, dissemination, and protection.

INSTRUCTIONS FOR RECORDING THE TRIP Odometer and AVG ECONOMY on the **20XX XXXXXXXX**  
**Xxxxxxxxxx**, Test Group **XXXXV0X.XXXX**

---

On the attached Driver Information Center Fuel Economy Display DATA SHEET – Record the Test Date

RESET BOTH the TRIP Odometer and the AVG ECONOMY on the Driver Information Center prior to performing the FTP.

After completing Bag 2 record the TRIP Odometer and the AVG ECONOMY on the attached DATA SHEET.

After completing Bag 3 record the TRIP Odometer and the AVG ECONOMY on the attached DATA SHEET.

RESET BOTH the TRIP Odometer and the AVG ECONOMY on the Driver Information Center prior to performing the sampled portion of the HFET.

After completing the HFET record the TRIP Odometer and the AVG ECONOMY on the attached DATA SHEET.

RESET BOTH the TRIP Odometer and the AVG ECONOMY on the Driver Information Center prior to performing the sampled portion of the US06.

After completing the US06 record the TRIP Odometer and the AVG ECONOMY on the attached DATA SHEET.

---

#### Instructions for resetting the Trip Odometer and Average Economy

Refer to the attached pages from the 2011 Xxxxxxxxxx owners manual for additional details and figures.

#### Resetting the Trip Odometer

Press the trip/fuel button until TRIP displays in the readout located below the speedometer. Reset the trip odometer to zero by pressing the DIC set/reset button while the trip odometer is displayed.

#### Resetting the Average Economy

Press the trip/fuel button until AVG ECONOMY displays in the readout located below the speedometer. Reset AVG ECONOMY by pressing and holding the set/reset button while the AVG ECONOMY is displayed.

---

Driver Information Center Fuel Economy Display DATA SHEET

20XX XXXXXX XXXXXXXXX

Test Group: XXXXXXXX.XXXX

TEST DATE: \_\_\_\_\_

After completing the following portion of each test record the TRIP odometer and AVG ECONOMY below:

TRIP Odometer after Bag 2 of the FTP test \_\_\_\_\_ miles

AVG ECONOMY after Bag 2 of the FTP test \_\_\_\_\_ mpg

TRIP Odometer after Bag 3 of the FTP test \_\_\_\_\_ miles

AVG ECONOMY after Bag 3 of the FTP test \_\_\_\_\_ mpg

TRIP Odometer after Highway test \_\_\_\_\_ miles

AVG ECONOMY after the Highway test \_\_\_\_\_ mpg

TRIP Odometer after US06 test \_\_\_\_\_ miles

AVG ECONOMY after the US06 test \_\_\_\_\_ mpg

Comments: \_\_\_\_\_

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**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; Chris McCarthy[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; rloeffler@sae.org[rloeffler@sae.org]; Yuhase, Nicole (L. )[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]

**From:** Wright, DavidA

**Sent:** Thur 12/11/2014 4:48:02 PM

**Subject:** J3066 Task Force - Example Drive Instructions and Data Sheet for Recording Trip Fuel Economy During Exhaust Emission Testing  
Fuel Economy Display Procedure and Data Sheet Ver 11Dec14.docx

Attached is a copy of the Driver Instructions and Data Sheet for resetting and recording the driver information center fuel economy display during exhaust emission testing. The instructions and data sheet include directions for recording information during FTP, HWY, and US06 exhaust emission tests.

The attached sheet is an example of the instructions provided for EPA testing. Feel free to use the attached as a guide if you are interested in performing any internal testing. At the last task force meeting we also discussed reviewing some of the initial data that has been developed to date. EPA at this time has two test vehicles for which data has been recorded and is interested in sharing these results at our next task force meeting.

Let me know if you have any questions regarding the attached example.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; Chris McCarthy[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; Roxanne Loeffler[rloeffler@sae.org]; Yuhase, Nicole (L. )[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]  
**From:** Wright, DavidA  
**Sent:** Tue 12/2/2014 11:34:09 PM  
**Subject:** J3066 Task Force Meeting Thursday, December 4  
Agenda J3066 Task Force December 4 2014.docx

The next meeting of the J3066 Task Force will take place at the EPA office in Ann Arbor from 1 – 2 pm. Attached is the Agenda for the meeting. A webex and conference line will be set up for the meeting.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov



## **AGENDA**

**J3066 - On-Board Fuel Consumption Measurement  
and Reporting Standard Task Force Meeting**

Chair – D. Wright

Thursday, December 4, 2014, 1:00 – 2:00 PM EDT

EPA Office of Transportation and Air Quality (Office Building)

Conference Room N125

2000 Traverwood Drive, Ann Arbor, MI 48105

WebEx/Teleconference Available

**1. Welcome and Introductions**

At the beginning of each meeting the chairman must review the SAE Anti-Trust Statement, the SAE Patent Disclosure Statement, the SAE Transparency Statement and the IP Statement provided below.

**2. Membership Review**

**3. Document Review**

**J3066: “On-Board Fuel Consumption and Measurement Reporting Standard”**

Sponsor: D. Wright

- Draft Document Review

**4. Old Business**

**5. New Business**

**6. Next Meeting**

- January 8, 2014 (proposed)

**IMPORTANT NOTE:** Please be sure to provide the minutes and all attachments to the minutes in electronic format to SAE Staff.

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**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; Chris McCarthy[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; Roxanne Loeffler[rloeffler@sae.org]; Yuhase, Nicole (L. )[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]  
**From:** Wright, DavidA  
**Sent:** Tue 11/4/2014 6:21:12 PM  
**Subject:** Cancelled J3066 Task Force Meeting Tentatively Scheduled for Thursday, November 6

I have a conflict for this Thursday and will not be able to host the J3066 Task Force meeting. I will send an e-mail next week proposing the next date for the Task Force meeting.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; Chris McCarthy[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; Yuhase, Nicole (L. )[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]  
**Cc:** mark.a.theobald@gm.com[mark.a.theobald@gm.com]  
**From:** Wright, DavidA  
**Sent:** Tue 10/14/2014 8:54:24 PM  
**Subject:** SAE J3066 Volumetric Fuel Calculation Methodology  
fuel economy display validation test\_2Oct14.docx

At the October 2 meeting of the J3066 the method for calculating the volumetric fuel economy (not correcting to the 1975 fuel parameters) was presented. The method is attached as Appendix A in the attached document. This calculation is needed to be described separately from the fuel economy equation in the Federal Register, as, the Federal Register listed calculation includes the weighting for the differences in fuel properties from the 1975 fuel.

Please review Appendix A and let me know if you have any corrections, questions, or comments. Also, the percent difference calculation currently does not have any correction to account for the differences in the specific gravity of the test fuel and the specific gravity used in the on-board calculation. The difference in the specific gravity between the actual test fuel and the valued used for the on-board calculation needs to be accounted in the percent difference calculation.

Thank you for your review. The next meeting of the J3066 task force is scheduled for November 6<sup>th</sup> at the EPA office on Traverwood.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

# DRAFT

## FUEL ECONOMY DISPLAY CHASSIS DYNAMOMETER VALIDATION TESTING

### RATIONALE

This test method is used to determine the accuracy of the vehicle's fuel economy display. The vehicle information center's displayed average fuel economy is recorded at the conclusion of a chassis dynamometer test and then is compared to the carbon-balance fuel economy measured during the chassis dynamometer test.

### 2. REFERENCES

#### 2.1 CFR Publications

The CFR is available from the Superintendent of Documents, U.S. Government Printing Office, Mail Stop: SSOP, Washington, DC, 20402-9320, <http://www.gpoaccess.gov/cfr/index.html>.

40 CFR Part 86              Control of Emissions from New and In-Use Highway Vehicles and Engines

40 CFR Part 600              Fuel Economy and Greenhouse Gas Exhaust Emissions of Motor Vehicles

#### 2.2 ASTM Publications

ASTM publications are available from the American Society of Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, <http://www.astm.org>.

ASTM D 1298 Standard

ASTM D 3343 Standard

### 3. DEFINITIONS

### 4. CHASSIS DYNAMOMETER VALIDATION OF VEHICLE INFORMATION CENTER DISPLAYED AVERAGE FUEL ECONOMY

#### 4.1 Average Fuel Economy Display Validation Procedure – 75° FTP Test

Prior to beginning the 75° FTP exhaust emission test, reset the vehicle's average fuel economy display.

At the completion of the 75° FTP test, when the engine has been turned off at the conclusion of Phase 3, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for each bag of the 75° FTP test according to the methodology described in Appendix A.

Average the Bag 1, Bag 2, and Bag 3 volumetric fuel economy results using the following equation –

$$\text{Test Average MPG} = (\text{B1 dist} + \text{B2 dist} + \text{B3 dist}) / [(\text{B1 dist/B1 mpg}) + (\text{B2 dist/B2 mpg}) + (\text{B3 dist/B3 mpg})]$$

Where,

Test Average MPG = Calculated average volumetric MPG (not the hot/cold weighted value) observed during the 75° FTP test.

B1 dist, B2 dist, B3 dist = Measured distance travelled during the individual phases of the 75° FTP test.

# DRAFT

FTP test.

B1 mpg, B2 mpg, B3 mpg = Calculated volumetric fuel economy (see Appendix A) measured during the individual phases of the 75□ FTP test.

Determine the percent difference between the value recorded from the fuel economy display and the calculated 75□ FTP Test Average MPG –

Percent Difference = [(Display MPG – 75□ FTP Test Average MPG)/ 75□ FTP Test Average MPG] \* 100

## 4.2 Average Fuel Economy Display Validation Procedure – Highway Fuel Economy Test

Immediately prior to beginning the sampled portion of the highway fuel economy test (HFET), reset the vehicle's average fuel economy display.

At the completion of the highway fuel economy test, when the engine has been turned off at the conclusion test, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for the HFET test according to the methodology described in Appendix A.

Determine the percent difference between the value recorded from the fuel economy display and the carbon-balance calculated highway fuel economy test MPG –

Percent Difference = [(Display MPG – HFET MPG)/HFET MPG] \* 100

## 4.3 Average Fuel Economy Display Validation Procedure – US06 Test

Prior to beginning the US06 exhaust emission test, reset the vehicle's average fuel economy display.

At the completion of the US06 test, when the engine has been turned off at the conclusion of the test, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for the US06 test according to the methodology described in Appendix A. If a split bag US06 test is performed calculate the volumetric fuel economy for each bag of the test.

Average the Bag 1 and Bag 2 volumetric fuel economy results using the following equation –

$$\text{Test Average MPG} = (\text{B1 dist} + \text{B2 dist}) / [(\text{B1 dist}/\text{B1 mpg}) + (\text{B2 dist}/\text{B2 mpg})]$$

Where,

Test Average MPG = Calculated average MPG observed during the city and highway portions of the US06 test.

B1 dist and B2 dist = Measured distance travelled during the city and highway phases of the US06 test.

B1 mpg and B2 mpg = Calculated volumetric fuel economy measured during the city and highway phases of the US06 test.

Determine the percent difference between the value recorded from the fuel economy display and

# DRAFT

the calculated US06 Test Average MPG –

$$\text{Percent Difference} = [(\text{Display MPG} - \text{US06 Test Average MPG}) / \text{US06 Test Average MPG}] * 100$$

## 4.4 Average Fuel Economy Display Validation Procedure – SC03 Fuel Economy Test

Immediately prior to beginning the sampled portion of the SC03 test, reset the vehicle's average fuel economy display.

At the completion of the SC03 test, when the engine has been turned off at the conclusion test, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for the SC03 test according to the methodology described in Appendix A.

Determine the percent difference between the value recorded from the fuel economy display and the calculated volumetric SC03 MPG –

$$\text{Percent Difference} = [(\text{Display MPG} - \text{SC03 MPG}) / \text{SC03 MPG}] * 100$$

## 4.5 Average Fuel Economy Display Validation Procedure – Cold CO Test

Prior to beginning the Cold CO exhaust emission test, reset the vehicle's average fuel economy display.

At the completion of the Cold CO test, when the engine has been turned off at the conclusion of Phase 3, record the average fuel economy value displayed on the vehicle information center.

Calculate the volumetric fuel economy for each bag of the Cold CO test according to the methodology described in Appendix A.

Average the Bag 1, Bag 2, and Bag 3 volumetric fuel economy results using the following equation –

$$\text{Test Average MPG} = (\text{B1 dist} + \text{B2 dist} + \text{B3 dist}) / [(\text{B1 dist/B1 mpg}) + (\text{B2 dist/B2 mpg}) + (\text{B3 dist/B3 mpg})]$$

Where,

Test Average MPG = The average MPG (not the hot/cold weighted value) observed during the Cold CO test.

B1 dist, B2 dist, B3 dist = The actual distance travelled during the individual phases of the Cold CO test.

B1 mpg, B2 mpg, B3 mpg = The calculated volumetric fuel economy measured during the individual phases of the Cold CO test.

Determine the percent difference between the value recorded from the fuel economy display and the calculated Cold CO Test Average MPG –

$$\text{Percent Difference} = [(\text{Display MPG} - \text{Cold CO Test Average MPG}) / \text{Cold CO Test Average MPG}] * 100$$

## APPENDIX A – CALCULATING VOLUMETRIC FUEL ECONOMY

# DRAFT

## A.1 PREFACE

The fuel economy calculations in Part 600 (§600.113-12) of the Federal Register include factors for correcting the observed fuel economy to a value representative of 1975 gasoline properties. This appendix provides the appropriate method to determine a volumetric fuel economy based on the measured properties of the fuel used during the exhaust emission tests. The method uses measured fuel properties to determine the grams of carbon per gallon of test fuel combined with the hydrocarbon (HC), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>) emission rates (grams/mile) to calculate the fuel economy in miles per gallon (mpg).

## A.2 REQUIRED TEST FUEL PROPERTIES

A.2.1 Specific gravity (SG) measured using ASTM D 1298.

A.2.2 Carbon weight fraction (CWF) measured using ASTM D 3343.

## A.3 REQUIRED EMISSION MEASUREMENTS

Perform the exhaust emission test procedures according to the methods outlined in CFR Part 86 or CFR Part 1066. Use the calculation methods described in the appropriate part to determine the exhaust emission rates in grams/mile for the following emission constituents – hydrocarbons (HC), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>).

## A.4 VOLUMETRIC FUEL ECONOMY CALCULATION

Per bag volumetric miles per gallon is calculated by dividing the grams of carbon per gallon (gmC/gal) of fuel by the grams of carbon emitted by the vehicle per mile driven (gmC/mile). The grams of carbon emitted are calculated by multiplying the HC, CO, and CO<sub>2</sub> emission rate by the emission constituents carbon mass fraction (CMF). The carbon mass fraction of THC is calculated based on the CWF of the test fuel.

$$\text{gmC/gal} = \text{CWF} \times \text{SG} \times \text{Density of H}_2\text{O} @ 20^\circ\text{C} (998,200 \text{ gm/m}^3) \times (1 / 264.17 \text{ gal/m}^3)$$

$$\text{CMF}_{\text{HC}} = 12.011 / [12.011 + (\text{CWF} * 1.008)]$$

$$\text{CMF}_{\text{CO}} = 12.011 / (12.011 + 15.999) = 0.429$$

$$\text{CMF}_{\text{CO}_2} = 12.011 / [12.011 + (15.999 \times 2)] = 0.273$$

$$\text{gmC/mile} = [\text{CMF}_{\text{HC}} \times (\text{HC}_{\text{mass}} / \text{Bag dist})] + [\text{CMF}_{\text{CO}} \times (\text{CO}_{\text{mass}} / \text{Bag dist})] + [\text{CMF}_{\text{CO}_2} \times (\text{CO}_{2\text{mass}} / \text{Bag dist})]$$

$$\text{MPG} = \text{gmC/gal} / \text{gmC/mile}$$

Where,

HC<sub>mass</sub>, CO<sub>mass</sub>, CO<sub>2mass</sub> – bag measured HC, CO, and CO<sub>2</sub> mass emissions measured and calculated per CFR Part 86 or Part 1066.

Bag dist – measured driving distance during the bag sampling period.

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; Chris McCarthy[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; rloeffler@sae.org[rloeffler@sae.org]; Yuhase, Nicole (L. )[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]  
**From:** Wright, DavidA  
**Sent:** Tue 9/23/2014 1:49:33 PM  
**Subject:** Next meeting of the J3066 Task Force has been moved to October 2.

The next meeting of the J3066 task force will take place at the EPA Office of Transportation and Air Quality. A meeting announcement will be e-mailed to task force members with conference call and webex information for the October 2 meeting.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; Chris McCarthy[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; rloeffler@sae.org[rloeffler@sae.org]; Yuhase, Nicole (L. )[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]  
**From:** Wright, DavidA  
**Sent:** Mon 9/22/2014 5:04:22 PM  
**Subject:** Propose moving J3066 Task Force Meeting to October 2 from September 25

I would like to propose moving the next J3066 task force meeting from this Thursday, September 25 to Thursday, October 2 from 1 until 3 pm. Let me know if anyone has any conflicts with this proposed change.

Thanks,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

**To:** Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]  
**From:** Wright, DavidA  
**Sent:** Mon 8/11/2014 2:01:32 PM  
**Subject:** RE: Proposed August Meeting Date for J3066 Task Force

Jenny,

Since most of our J3066 have been winding down around 2:30 and not extending until 3 pm, I plan to move the meeting date to Wednesday from Thursday. Thank you for sharing your availability.

Regards,

David

**From:** Sigelko, Jenny (EEO) [mailto:[Jenny.Sigelko@vw.com](mailto:Jenny.Sigelko@vw.com)]  
**Sent:** Friday, August 08, 2014 8:18 AM  
**To:** Wright, DavidA  
**Subject:** RE: Proposed August Meeting Date for J3066 Task Force

I'm available until about 2:30 on 8/20, and all day 8/21.

Thanks

Jenny

Jenny Sigelko

Volkswagen Group of America

EEO-Auburn Hills MI

248 754 4214

Jenny.Sigelko@VW.com

**From:** Wright, DavidA [mailto:[Wright.DavidA@epa.gov](mailto:Wright.DavidA@epa.gov)]  
**Sent:** Thursday, August 07, 2014 5:49 PM  
**To:** Tommy\_Chang@ahm.honda.com; Buller, Patrick; chris.mccarthy@gm.com; sconrad@hatci.com; Tom Beierschmitt (TEMA TTC); mky@chrysler.com; dennis.pawlak@na.mitsubishi-motors.com; douglas.reid@na.mitsubishi-motors.com; Paulina, Carl; Chris Nevers; Glodich, Jeffrey (J.M.); William Beggs; Ryan McGavock; Sigelko, Jenny (EEO); [nokawa@mazdausa.com](mailto:nokawa@mazdausa.com); Duoba, Michael J.; Roxanne Loeffler; Yuhase, Nicole (L.); [yosuke\\_sato@ahm.honda.com](mailto:yosuke_sato@ahm.honda.com); Ellies, Ben; Bowu Reed  
**Cc:** mark.a.theobald@gm.com  
**Subject:** Proposed August Meeting Date for J3066 Task Force

I would like to propose a revision to the meeting date for the August Task Force meeting. I propose the next meeting for the J3066 Task Force take place on Wednesday, August 20 from 1 til 3 pm at the EPA office on Traverwood in Ann Arbor, we had previously discussed meeting on Thursday, August 21. Let me know if Wednesday, August 20th will not work for any Task Force members.

Thanks,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)



**To:** Tommy\_Chang@ahm.honda.com[Tommy\_Chang@ahm.honda.com]; Buller, Patrick[patrick.buller@volvocars.com]; chris.mccarthy@gm.com[chris.mccarthy@gm.com]; sconrad@hatci.com[sconrad@hatci.com]; Tom Beierschmitt (TEMA TTC)[tom.beierschmitt@tema.toyota.com]; mky@chrysler.com[mky@chrysler.com]; dennis.pawlak@na.mitsubishi-motors.com[dennis.pawlak@na.mitsubishi-motors.com]; douglas.reid@na.mitsubishi-motors.com[douglas.reid@na.mitsubishi-motors.com]; Paulina, Carl[paulina.carl@epa.gov]; Chris Nevers[CNevers@autoalliance.org]; Glodich, Jeffrey (J.M.)[jglodich@ford.com]; William Beggs[william.beggs@gm.com]; Ryan McGavock[DRM202@chrysler.com]; Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]; nokawa@mazdausa.com[nokawa@mazdausa.com]; Duoba, Michael J.[mduoba@anl.gov]; Roxanne Loeffler[rloeffler@sae.org]; Yuhase, Nicole (L. )[nyuhase@ford.com]; yosuke\_sato@ahm.honda.com[yosuke\_sato@ahm.honda.com]; Ellies, Ben[ellies.ben@epa.gov]; Bowu Reed[bowu.reed@na.mitsubishi-motors.com]  
**Cc:** mark.a.theobald@gm.com[mark.a.theobald@gm.com]  
**From:** Wright, DavidA  
**Sent:** Thur 8/7/2014 9:48:59 PM  
**Subject:** Proposed August Meeting Date for J3066 Task Force

I would like to propose a revision to the meeting date for the August Task Force meeting. I propose the next meeting for the J3066 Task Force take place on Wednesday, August 20 from 1 til 3 pm at the EPA office on Traverwood in Ann Arbor, we had previously discussed meeting on Thursday, August 21. Let me know if Wednesday, August 20th will not work for any Task Force members.

Thanks,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

**To:** Allen, Gregory (EEO)[[Gregory.Allen@vw.com](mailto:Gregory.Allen@vw.com)]  
**Cc:** Schlueter, Hannah (EASZ/1)[[hannah.schlueter@volkswagen.de](mailto:hannah.schlueter@volkswagen.de)]; Giles, Michael (EEO)[[michael.giles@vw.com](mailto:michael.giles@vw.com)]; Rodgers, William (EEO)[[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)]  
**From:** Wright, DavidA  
**Sent:** Wed 7/30/2014 7:55:03 PM  
**Subject:** RE: Golf TDI M6 testing

Greg,

I not able to answer your questions at this time, Vince and/or I will get back with you tomorrow morning after our morning meeting with the laboratory.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)

**From:** Allen, Gregory (EEO) [<mailto:Gregory.Allen@vw.com>]  
**Sent:** Wednesday, July 30, 2014 3:10 PM  
**To:** Wright, DavidA  
**Cc:** Schlueter, Hannah (EASZ/1); Giles, Michael (EEO); Rodgers, William (EEO)  
**Subject:** FW: Golf TDI M6 testing

Hello David,

In Jims absence, can you assist with the questions below?

Thanks.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**From:** Allen, Gregory (EEO)  
**Sent:** Wednesday, July 30, 2014 3:06 PM  
**To:** [snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
**Cc:** Giles, Michael (EEO); Rodgers, William (EEO); Thomas, Richard (EEO)  
**Subject:** Golf TDI M6 testing

Hello Jim,

Is there a status update on the shift schedule issue that you can give us? I've tried to call Vince a few times, but have been unsuccessful in reaching him.

**Ex. 4, 7**

**Ex. 4, 7**

Feel free to give myself or Mike Giles a call to discuss.

Thanks Jim.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Sigelko, Jenny (EEO)[Jenny.Sigelko@vw.com]  
**From:** Wright, DavidA  
**Sent:** Thur 5/15/2014 12:50:46 PM  
**Subject:** RE: Proposed Draft MPG/MPGe Calculation Method added to J3066 Subcommittee Work Area

Jenny,

We have a meeting scheduled for Thursday May 22 from 1 – 3 pm at the EPA office building (2000 Traverwood). The announcement should be sent out by SAE today. I will also send the draft agenda out to all the interested parties later this afternoon.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: wright.davida@epa.gov

**From:** Sigelko, Jenny (EEO) [mailto:[Jenny.Sigelko@vw.com](mailto:Jenny.Sigelko@vw.com)]  
**Sent:** Thursday, May 15, 2014 5:01 AM  
**To:** Wright, DavidA  
**Subject:** RE: Proposed Draft MPG/MPGe Calculation Method added to J3066 Subcommittee Work Area

Good morning David,

Sorry to have missed last week's meeting. Can you please tell me what the next meeting time and location are?

Thanks

Jenny

Jenny Sigelko

Volkswagen Group of America

EEO-Auburn Hills MI

248 754 4214

[Jenny.Sigelko@VW.com](mailto:Jenny.Sigelko@VW.com)

**From:** Wright, DavidA [mailto:[Wright.DavidA@epa.gov](mailto:Wright.DavidA@epa.gov)]  
**Sent:** Wednesday, May 07, 2014 9:44 AM  
**To:** [patrick.buller@volvocars.com](mailto:patrick.buller@volvocars.com); [Tommy\\_Chang@ahm.honda.com](mailto:Tommy_Chang@ahm.honda.com); [chris.mccarthy@gm.com](mailto:chris.mccarthy@gm.com); [sconrad@hatci.com](mailto:sconrad@hatci.com); [tom.beierschmitt@tema.toyota.com](mailto:tom.beierschmitt@tema.toyota.com); [mky@chrysler.com](mailto:mky@chrysler.com); [dennis.pawlak@na.mitsubishi-motors.com](mailto:dennis.pawlak@na.mitsubishi-motors.com); [douglas.reid@na.mitsubishi-motors.com](mailto:douglas.reid@na.mitsubishi-motors.com); Paulina, Carl; Chris Nevers; Glodich, Jeffrey (J.M.); William Beggs; [drm202@chrysler.com](mailto:drm202@chrysler.com); Sigelko, Jenny (EEO); [nokawa@mazdausa.com](mailto:nokawa@mazdausa.com); [mduoba@anl.gov](mailto:mduoba@anl.gov); [mark.a.theobald@gm.com](mailto:mark.a.theobald@gm.com); Dalton, Joel; Ellies, Ben; Snyder, Jim  
**Subject:** Proposed Draft MPG/MPGe Calculation Method added to J3066 Subcommittee Work Area

Attached to this e-mail is a copy of the initial draft document with a proposed calculation methodology for MPG/MPGe for the J3066 Standard. Please review this draft and you can begin providing me with comments. We will set the time and location for the next J3066

subcommittee meeting at tomorrow's committee meeting.

Regards,

David

David A. Wright

Light-Duty Vehicle Center, Compliance Division

National Vehicle and Fuel Emissions Laboratory

Phone: (734) 214-4467

E-mail: [wright.davida@epa.gov](mailto:wright.davida@epa.gov)

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [redacted] Ex. 7 [redacted] @vw.com]; [redacted] Ex. 7 [redacted]  
[redacted] Ex. 7 [redacted] vw.com]  
**From:** [redacted] Ex. 7  
**Sent:** Mon 7/7/2014 3:04:46 PM  
**Subject:** RE: VW Group - Golf 2.0L TD

**Ex. 7**

Hello Jim,

Thanks for the quick reply.

Yes, these are [redacted] **Ex. 7** [redacted] and as far as we could tell from looking at the old files, have not used before in previous concepts.

On a related note, in order to consolidate the [redacted] **Ex. 7** [redacted] we recently loaded some of the [redacted] **Ex. 7** [redacted] (but only where the data and index matched between mfr codes). The remaining we will probably load to VGA on an as needed basis.

Regards,

[redacted] **Ex. 7** [redacted]

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Monday, July 07, 2014 10:58 AM  
**To:** [redacted] Ex. 7 [redacted]  
**Subject:** RE: VW Group - Golf 2.0L TD [redacted] Ex. 7 [redacted]

Mike , I will remind Ben no t to schedule the testing for before then. Do you know if those are new shift schedules or have they been previously used by the lab? I have to follow up on them with the lab if they haven't been used in their system before.

Jim

**From:** [redacted] Ex. 7 [redacted]@vw.com]

**Sent:** Thursday, July 03, 2014 10:12 AM

**To:** Snyder, Jim

**Cc:** [redacted]

Ex. 7

[redacted]  
Ex. 7

**Subject:** VW Group - Golf 2.0L TD [redacted] **Ex. 7** supplemental Information

Hello Jim,

Today we sent the supplemental information for the Golf diesel which was selected for FTP / Hwy confirmatory testing.

**Ex. 7**

[redacted] which

Please note that due to logistical issues, the earliest availability date for this vehicle has changed to **July 28<sup>th</sup>**. We are letting you know since we are unable to correct the original date sent in the decision information data set.

Please advise with the actual test date when it is set.

Regards

[redacted]  
**Ex. 7**

**Ex. 7**

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone:

Fax:

mailto:

**Ex. 7**

**To:** Rodgers, William (EEO)[William.Rodgers@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Mon 7/7/2014 2:28:37 PM  
**Subject:** RE: VW Tests

Good morning Bill,

I have not received any results from the lab. I'll forward them as soon as I get them.

Thanks,

Vince Mazaitis

**From:** Rodgers, William (EEO) [mailto:William.Rodgers@vw.com]  
**Sent:** Monday, July 07, 2014 9:21 AM  
**To:** Mazaitis, Vincent  
**Subject:** VW Tests

Hello Vince,

I left a voice mail for Jim Snyder but thought I would also send a reminder to you regarding the test results pending for two vehicles tested late last week. Any follow up you can do would be appreciated.

VID: 370-50379/15 (Golf diesel)

VID: FAPA-RAF (Golf 1.8L gas)

Thanks,

Bill Rodgers

VWGoA EEO

(248) 754-4219



**To:** Mazaitis, Vincent[mazaitis.vincent@epa.gov]; Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Giles, Michael (EEO)  
**Sent:** Thur 7/3/2014 4:36:51 PM  
**Subject:** VW Preliminary data

Hello Vince or Jim,

As a follow up to an earlier request from Bill: if there is any chance to get early results for the Jetta diesel , please forward them to me.

I know Bill requested the same information earlier but he is gone this afternoon.

Thanks,

Mike

Michael Giles

Certification Engineer

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4229

Fax: 248 754 4207

mailto: [Michael.Giles@VW.com](mailto:Michael.Giles@VW.com)



**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [redacted] Ex. 7  
[redacted] Ex. 7  
[redacted] Ex. 7 [redacted] @vw.com]  
**From:** [redacted] Ex. 7  
**Sent:** Thur 7/3/2014 2:12:07 PM  
**Subject:** VW Group - Golf 2.0L TDI Manual Supplemental Information

Hello Jim,

Today we sent the supplemental information for the [redacted] diesel with [redacted] was selected for FTP / Hwy confirmatory testing.

**Ex. 7**

Please note that due to logistical issues, the earliest availability date for this vehicle has changed to **July 28<sup>th</sup>**. We are letting you know since we are unable to correct the original date sent in the decision information data set.

Please advise with the actual test date when it is set.

Regards

[redacted] Ex. 7 [redacted]

**Ex. 7**

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone:

Fax:

mailto:

**Ex. 7**

**To:** Bill Rodgers (william.Rodgers@vw.com)[william.Rodgers@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Wed 7/2/2014 5:52:08 PM  
**Subject:** VW361-0-0250  
VW361-0-0250\_7-2-14.pdf

Please find enclosed the Laboratory Test Data for the Subject vehicle. If you have any questions or concerns, please contact me.

Thank You,

Vincent Mazaitis

(734)214-4864

**To:** Bill Rodgers (william.Rodgers@vv.com)[william.Rodgers@vv.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Wed 7/2/2014 12:40:03 PM  
**Subject:** VW361 50070 15  
VW361 50070 15\_7-1-14.pdf

Please find enclosed the Laboratory Test Data for the Subject vehicle. If you have any questions or concerns, please contact me.

Thank You,

Vincent Mazaitis  
(734)214-4864

**To:** Rodgers, William (EEO)[William.Rodgers@vw.com]  
**Cc:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Mazaitis, Vincent  
**Sent:** Tue 7/1/2014 10:39:44 AM  
**Subject:** RE: VW Testing

Hello Bill,

Sorry for the late response.

The vehicle to be tested is VW361 50070/15. I'm not sure when it is testing.

Please have your witness here at 7:00 am.

Thanks,

Vince Mazaitis

**From:** Rodgers, William (EEO) [mailto:William.Rodgers@vw.com]  
**Sent:** Monday, June 30, 2014 1:33 PM  
**To:** Mazaitis, Vincent  
**Cc:** Snyder, Jim  
**Subject:** VW Testing

Hello Vince,

While delivering four Volkswagen test vehicles at your facility this morning, we were informed by Ben that you would likely test one of the diesel models on Tuesday, instead of Wednesday as planned. Please confirm for us which vehicle will be tested and what time we should expect it to begin? We plan to have someone on hand to witness the tests.

Also please let us know when you intend to start testing on Wednesday and in what order the remaining vehicles will be tested.

Thanks,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Mon 6/30/2014 6:41:11 PM  
**Subject:** RE: VW Testing

No I was just about to start calling. Can you follow up?

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Monday, June 30, 2014 2:40 PM  
**To:** Rodgers, William (EEO)  
**Subject:** RE: VW Testing

Bill, Did Vince ever get back to you on this? I never caught him at his desk today.

**From:** Rodgers, William (EEO) [mailto:William.Rodgers@vw.com]  
**Sent:** Monday, June 30, 2014 1:33 PM  
**To:** Mazaitis, Vincent  
**Cc:** Snyder, Jim  
**Subject:** VW Testing

Hello Vince,

While delivering four Volkswagen test vehicles at your facility this morning, we were informed by Ben that you would likely test one of the diesel models on Tuesday, instead of Wednesday as planned. Please confirm for us which vehicle will be tested and what time we should expect it to begin? We plan to have someone on hand to witness the tests.

Also please let us know when you intend to start testing on Wednesday and in what order the remaining vehicles will be tested.

Thanks,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**From:** [REDACTED] **Ex. 7**  
**Location:** AA-Room-Office-N66-ConfRoom/AA-OTAQ-OFFICE  
**Importance:** Normal  
**Subject:** Accepted: VW PHEV label calculation and BEV testing  
**Start Date/Time:** Thur 7/10/2014 1:30:00 PM  
**End Date/Time:** Thur 7/10/2014 2:30:00 PM

;

**From:** Tamborra, Nick (EEO)  
**Location:** AA-Room-Office-N66-ConfRoom/AA-OTAQ-OFFICE  
**Importance:** Normal  
**Subject:** Accepted: VW PHEV label calculation and BEV testing  
**Start Date/Time:** Thur 7/10/2014 1:30:00 PM  
**End Date/Time:** Thur 7/10/2014 2:30:00 PM

;

**From:** Tamborra, Nick (EEO)  
**Location:** AA-Room-Office-N66-ConfRoom/AA-OTAQ-OFFICE  
**Importance:** Normal  
**Subject:** Accepted: VW PHEV label calculation and BEV testing  
**Start Date/Time:** Thur 7/10/2014 1:30:00 PM  
**End Date/Time:** Thur 7/10/2014 2:30:00 PM

;

**From:** [REDACTED] **Ex. 7**  
**Location:** AA-Room-Office-N66-ConfRoom/AA-OTAQ-OFFICE  
**Importance:** Normal  
**Subject:** Accepted: VW PHEV label calculation and BEV testing  
**Start Date/Time:** Thur 7/10/2014 1:30:00 PM  
**End Date/Time:** Thur 7/10/2014 2:30:00 PM

;

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [REDACTED] Ex. 7 [REDACTED] @vw.com [REDACTED] Ex. 7

**Ex. 7**

**From:** [REDACTED] Ex. 7  
**Sent:** Fri 6/27/2014 5:52:37 PM  
**Subject:** RE: EPA EV Testing Lab Charger Install

Thanks, Jim. See you next week.

**Ex. 7**

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Friday, June 27, 2014 11:11 AM  
**To:** [REDACTED] Ex. 7  
**Cc:** [REDACTED] Ex. 7  
**Subject:** RE: EPA EV Testing Lab Charger Install

Sure we can do that.

**From:** [REDACTED] Ex. 7 [REDACTED] @vw.com [REDACTED]  
**Sent:** Friday, June 27, 2014 11:03 AM  
**To:** Snyder, Jim  
**Cc:** [REDACTED] Ex. 7 [REDACTED]  
**Subject:** EPA EV Testing Lab Charger Install

Hi Jim,

I have been talking with Dan McBryde in the lab about installing EV chargers should our upcoming eGolf be tested in EPA. Dan is on vacation all next week, but he mentioned that we could stop into the lab charge monitoring area (by reception??) and take a look at the general set up. Would you mind walking us down there after our meeting on Tuesday afternoon? Should only take a few minutes.

Thanks

**Ex. 7**

**Ex. 7**

Engineering and Environmental Office

**Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [REDACTED]

Ex. 7

**Ex. 7**

**From:** [REDACTED] Ex. 7  
**Sent:** Fri 6/27/2014 3:03:03 PM  
**Subject:** EPA EV Testing Lab Charger Install

Hi Jim,

I have been talking with Dan McBryde in the lab about installing EV chargers should our upcoming eGolf be tested in EPA. Dan is on vacation all next week, but he mentioned that we could stop into the lab charge monitoring area (by reception??) and take a look at the general set up. Would you mind walking us down there after our meeting on Tuesday afternoon? Should only take a few minutes.

Thanks

[REDACTED] Ex. 7

[REDACTED] Ex. 7

Engineering and Environmental Office

[REDACTED] **Ex. 7**

To: Snyder, Jim[Snyder.Jim@epa.gov]  
Cc: Ex. 7

From: Ex. 7  
Sent: Mon 6/23/2014 7:42:11 PM  
Subject: VW Group - Scheduling Request Update

## Ex. 7

Hello Jim,

As you may recall, earlier this spring we made a special request for scheduling consideration for confirmatory testing of the new e-Golf (BEV) . This request was for the time frame of July 7<sup>th</sup>.

Today we were informed that there have been internal delays with this vehicle. Therefore, we are now withdrawing our request. We will follow up when data finally becomes available for this vehicle.

As always, thank you for your consideration with scheduling and our apologies for any inconvenience this may have caused.

Regards

Ex. 7

## Ex. 7

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone:

Fax:

mailto:

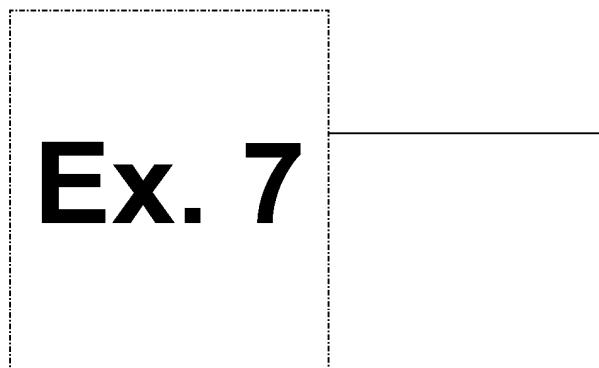
**Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED] Ex. 7  
**Sent:** Thur 6/19/2014 2:55:01 PM  
**Subject:** e-Golf Testing

Hello Jim:

Thanks for the discussion just now. You referenced page 10 of a handbook that includes NEMA codes for electrical connections. Perhaps we have seen this handbook and I just don't recall, but is this handbook something available to manufacturers?

Regards,



Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone:

Cell: (2

E-Mail:

A smaller rectangular redaction box is located at the bottom of the page, below the contact information. Inside this box, the text "Ex. 7" is printed in a large, bold, black font.

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** [REDACTED]  
**Sent:** Ex. 7  
**Mon:** 6/16/2014 1:09:06 PM  
**Subject:** RE: VW PHEV presentation

Hello,

I think there is time at the end of next week, maybe the afternoon June 26 or in the morning on the 27<sup>th</sup>? ASTM meeting are at the beginning of the week.

Thanks very much

**Ex. 7**

**Ex. 7**

**From:** Snyder, Jim [mailto:Snyder.Jim@epa.gov]  
**Sent:** Friday, June 13, 2014 11:13 AM  
**To:** [REDACTED] Ex. 7  
**Subject:** RE: VW PHEV presentation

Thanks for sending me the presentation. I have also forwarded it to others to review.

Unfortunately next week is not a good time since I will be off-site most of the week. How about some time the week of the 23<sup>rd</sup>?

Jim

**From:** [REDACTED] **Ex. 7** **@vw.com]**  
**Sent:** Wednesday, June 11, 2014 9:48 AM  
**To:** Snyder, Jim  
[REDACTED] **Ex. 7**  
**Subject:** VW PHEV presentation

Good morning Jim,

Stuart is out of the office this week and wanted me to send this updated PHEV presentation from our folks in Germany.

They would like to have a meeting with you (and possibly Rob?) next week to explain the details.

Do you have an hour or so for us to come see you (and Germany to be on the phone) early in the week?

Thanks very much,

**Ex. 7**

**Ex. 7**

---

Thank you,

**Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Fri 6/13/2014 5:05:14 PM  
**Subject:** VW Group Decision Information 2.0L Flex Fuel Allroad

Hello Jim,

Test results and decision information have been submitted for the Audi Allroad 2.0L Flex Fuel Testgroup: FVGAJ02.0AUF, for the Automatic 8 speed transmission. Vehicle ID's and info are below.

.....  
Vehicle ID: FAUF-BAA /config 0 (Gasoline Tests)

Purpose: FEDV

Tests Submitted: FTP / Hwy

.....  
Vehicle ID: FAUF-BAA /config 1 (E85 Tests)

Purpose: FEDV

Tests Submitted: FTP / Hwy

Please let me know if you have any questions.

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:**  **Ex. 7**  
**From:**  **Ex. 7**  
**Sent:** Fri 6/13/2014 1:28:57 PM  
**Subject:** Meeting with VW/Audi

Hello Jim:

I am not sure if you are aware of a VW Group meeting being set up for the morning of Wednesday, July 16, 2014 with Mike Olechiw and others to discuss outstanding issues with Tier 3 implementation. We would also like the opportunity to discuss SCR-related topics. Would it be possible to have that discussion in the afternoon of the same day? That would allow us to take advantage of the presence of colleagues from Volkswagen and Audi. The request would be for another couple of hours.

Best regards,

**Ex. 7**

Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.

Phone:   
Cell:   
E-Mail:

**Ex. 7**



**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**From:** Rodgers, William (EEO)  
**Sent:** Fri 6/13/2014 12:48:05 PM  
**Subject:** Status update - 2.0L TDI Certification

Hello Jim,

Can you give me an update on the status of a condition certificate for the diesel test group FVGAV02.0VAL. We are drawing near the expected launch dates.

Thanks,

Bill

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** [REDACTED]  
**From:** [REDACTED] Ex. 7  
**Sent:** Wed 6/11/2014 1:47:58 PM  
**Subject:** VW PHEV presentation  
PHEV\_Berechnungsvorlage\_02.pptx

Good morning Jim,

Stuart is out of the office this week and wanted me to send this updated PHEV presentation from our folks in Germany.

They would like to have a meeting with you (and possibly Rob?) next week to explain the details.  
Do you have an hour or so for us to come see you (and Germany to be on the phone) early in the week?

Thanks very much,

[REDACTED] Ex. 7 [REDACTED]

**Ex. 7**

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**Ex. 7**

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Giles, Michael (EEO)[michael.giles@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Allen, Gregory (EEO)  
**Sent:** Fri 6/6/2014 6:58:10 PM  
**Subject:** VW Group Decision Info Federal Only Passat 1.8L

Hello Jim,

Test results and decision information have been submitted for the Passat 1.8L Federal only Testgroup: FVGAV02.0VBD, for the Automatic 6 Speed and Manual 5 speed. Vehicle ID's and info are below.

.....  
**Automatic**

Vehicle ID: VW411-4-0168/15 /config #0

Purpose: FEDV

Tests Submitted: FTP / Hwy

.....  
**Manual**

Vchicle ID: VW411-4-0166/15 /config #0

Purpose: FEDV

Tests Submitted: FTP / Hwy

Regards,

Greg Allen

VWGoA EEO

(248)754-4209

**To:** Snyder, Jim[Snyder.Jim@epa.gov]  
**Cc:** Rodgers, William (EEO)[William.Rodgers@vw.com]; Allen, Gregory (EEO)[Gregory.Allen@vw.com]; Thomas, Richard (EEO)[Richard.Thomas@vw.com]  
**From:** Giles, Michael (EEO)  
**Sent:** Fri 6/6/2014 6:37:02 PM  
**Subject:** VW Group - Decision Info Passat 1.8L Manual

Hello Jim,

Test results and decision info for the Passat 1.8L with manual trans for test group FVGAV02.0VPD have been submitted.

Vehicle ID: VW411-4-0165/15 /config # 0.

Purpose: FEDV

Tests submitted: FTP / Hwy

Thanks,

Mike

Michael Giles

Certification Engineer

Engineering & Environmental Office (EEO)

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4229

Fax: 248 754 4207

mailto: [Michael.Giles@VW.com](mailto:Michael.Giles@VW.com)